

The gig economy paradox: Student beliefs about side hustle as opportunity and barrier to entrepreneurship

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Abstract

This study examined how student beliefs constructed side hustle as simultaneous opportunity and barrier to entrepreneurship. A sequential mixed-methods design was employed, involving thematic analysis of 30 students through interviews and focus group discussions, followed by regression analysis testing grade point average, working hours, and business type as stress predictors among 100 Indonesian student entrepreneurs using Depression Anxiety Stress Scales-21. Conventional structural predictors explained only a limited proportion of variance, with the regression model accounting for 5.6% of the total variance. Grade point average, working hours, and business type yielded null effects on psychological distress. Qualitative findings revealed psychosocial dominance: passion-driven motivation decoupled hours from distress, romantic partners functioned as primary buffer over peer networks, and "entrepreneur mindset" enabled resilience through stigma rejection. Academic performance remained high with mean grade point average of 3.62. The findings demonstrated that psychological resources overrode tangible depletion in collectivist contexts, requiring universities to reframe side hustle as experiential learning asset through credit recognition and resilience programs to cultivate entrepreneurial pipeline.

Keywords: Gig Economy, Student Entrepreneurship, Mixed-Methods, Psychological Stress, Social Support

Abstrak

Penelitian ini mengkaji bagaimana keyakinan mahasiswa mengonstruksi side hustle sebagai peluang sekaligus hambatan berwirausaha. Desain sekuensial metode campuran digunakan, melibatkan analisis tematik pada 30 mahasiswa melalui wawancara dan diskusi kelompok terfokus, dilanjutkan analisis regresi menguji indeks prestasi kumulatif, jam kerja, dan jenis bisnis sebagai prediktor stres pada 100 mahasiswa pengusaha Indonesia menggunakan Depression Anxiety Stress Scales-21. Variabel-variabel struktural yang umum digunakan dalam penelitian ini hanya mampu menjelaskan sebagian kecil variasi pada variabel yang diteliti, yaitu sebesar 5,6%. Indeks prestasi kumulatif, jam kerja, dan jenis bisnis menghasilkan efek nol terhadap distress psikologis. Temuan kualitatif mengungkap dominasi psikososial: motivasi berbasis passion memisahkan jam kerja dari distress, pasangan romantis berfungsi sebagai penyangga utama melebihi jaringan teman sebaya, dan "mental pebisnis" memungkinkan resiliensi melalui penolakan stigma. Prestasi akademik tetap tinggi dengan rerata indeks prestasi kumulatif 3,62. Temuan menunjukkan bahwa sumber daya psikologis mengungguli deplesi tangible dalam konteks kolektivistis, menuntut universitas membingkai ulang side hustle sebagai aset pembelajaran eksperiensial melalui pengakuan kredit dan program resiliensi untuk mengembangkan pipeline kewirausahaan.

Kata kunci: Ekonomi Gig, Kewirausahaan Mahasiswa, Mixed Method, Stres Psikologis, Dukungan Sosial

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1. Introduction

The gig economy has restructured entrepreneurial landscapes globally through digital platforms, flexible labor models, and expanded market access (Alauddin et al., 2024; Bucos, 2023; Hanifah et al., 2024; Wang, 2025). Unlike traditional employment, gig work enables individuals to acquire income, develop competencies, and build networks without full-time commitment (Alauddin et al., 2024; Ayu, 2024; Wulansari et al., 2024). Students increasingly leverage this architecture. Among Indonesian youth, side hustles (entrepreneurial activities concurrent with academic enrollment) now pervade campus culture (Ayu, 2024; Haryono & Zairina, 2022; Wulansari et al., 2024). How students believe side hustle will impact their lives determines whether they persist or abandon these ventures (Ayu, 2024; Wulansari et al., 2024).

These ventures span freelancing, e-commerce, content creation, and skill-based services (Geetha et al., 2024; Javokhir et al., 2025; Majumder, 2025). Benefits surface immediately: entrepreneurial mindset cultivation, managerial skill acquisition, financial autonomy (Damian & Empoli, 2020; Lynch & Corbett, 2021). Yet costs accumulate silently: disrupted academic focus, elevated psychological distress, identity conflict between student and entrepreneur roles (Perdana et al., 2025; Sirakaya, 2024). This tension constitutes the gig economy paradox (Perdana et al., 2025; Sirakaya, 2024). Critically, objective conditions (hours worked, income earned) matter less than subjective belief systems through which students interpret their dual-role experience (Majumder, 2025; Perdana et al., 2025; Sirakaya, 2024).

The rapid proliferation of digital ecosystems in Indonesia has structurally reduced entry barriers, thereby catalyzing widespread participation in platform-mediated entrepreneurial activities (Khan, 2022; Zaki et al., 2025). Internal university surveys document rising participation rates driven by financial necessity and business ideation (Fawaid et al., 2022; Widjaja et al., 2022). Higher education policy lags behind. Current academic programs, curricula, and student services fail to recognize entrepreneurial experience occurring outside formal institutional structures (Crysdian, 2022; Rauf et al., 2024), obstructing side hustle integration into competency development frameworks (Agustin et al., 2024; Lukita et al., 2025; Rauf et al., 2024).

Existing literature fragments into opposing camps. One stream celebrates economic gains: income growth, business acumen enhancement (Burnette et al., 2020; Guo et al., 2021). The opposing stream pathologizes mental health erosion and academic deterioration (Burnette et al., 2020; Guo et al., 2021). Three deficits persist. Studies integrating opportunity and barrier dimensions through student belief systems remain scarce in Indonesian contexts (Ba et al., 2025; King & Wang, 2025). Quantitative designs dominate, measuring objective variables (working hours, income, GPA) while ignoring the cognitive appraisals and meaning-making processes students employ to navigate entrepreneurial challenges. Theoretical frameworks (work-life balance, role conflict theory) assume external factors (work intensity, business type) predict distress (Burnette et al., 2020; Li et al., 2025). Recent qualitative evidence contradicts this: belief-mediated psychosocial variables (intrinsic motivation, social support perceptions,

coping efficacy beliefs) may supersede structural predictors (Ba et al., 2025; Burnette et al., 2020). The gap between theoretical assumptions and empirical complexity demands methodological triangulation. Understanding how students cognitively construct paradox (simultaneous opportunity and burden beliefs) proves essential for evidence-based institutional policy (Guo et al., 2021; King & Wang, 2025; Li et al., 2025). Without insight into belief systems and psychological processes governing persistence versus abandonment decisions, interventions risk misalignment with student realities.

This study deploys three questions. RQ1 (Qualitative): How do students' beliefs construct side hustle as opportunity and barrier? What themes emerge regarding motivational beliefs, perceived challenges, coping efficacy, and support appraisals? RQ2 (Quantitative): Do side hustle characteristics (GPA, working hours, business type) predict psychological distress among students? RQ3 (Integration): How do qualitative narratives regarding students' beliefs explain the statistical patterns of psychological distress predicted by side hustle characteristics?

We employ sequential exploratory mixed-methods design to qualitatively map students' belief systems before statistically testing their association with psychological distress (Al-Eisawi, 2025). Phase 1 explores belief systems and lived experiences of 30 student entrepreneurs through 15 semi-structured interviews and one FGD (n=15) via thematic analysis (Proudfoot, 2022). Phase 2 tests empirical relationships between side hustle characteristics and distress in 100 students using DASS-21 and multiple regression. Integration proceeds through joint display analysis identifying convergence, divergence, and complementarity across data types. This architecture serves dual purposes: (1) Depth-Breadth Synergy where qualitative captures subjective belief complexity inaccessible through structured surveys while quantitative validates pattern prevalence across larger populations (Proudfoot, 2022); (2) Epistemological Triangulation where data integration produces meta-inferences more robust than monomethod findings (Al-Eisawi, 2025). Example: if regression shows working hours fail to predict distress (null result), qualitative data exposes why: students holding passion-driven beliefs reframe high workload as identity investment rather than resource depletion.

Theoretically, this work extends Conservation of Resources (COR) Theory (Bardoel & Drago, 2021; Farkash et al., 2022; Liu* et al., 2023) to dual-role student-entrepreneur contexts. We demonstrate that psychological resources (resilience beliefs, cognitive reframing capabilities, perceived support quality) equal or exceed tangible resources (time, capital) in determining whether side hustle becomes opportunity or barrier. This advances entrepreneurship and gig economy literatures by integrating economic and psychosocial perspectives (Bardoel & Drago, 2021; Brykman & King, 2021). Practically, findings inform adaptive campus policy (Farkash et al., 2022; Jabeen et al., 2021). Five interventions emerge: (1) experiential learning credits recognizing entrepreneurial outcomes, (2) flexible course loads for intensive entrepreneurs, (3) targeted mentorship through alumni connections and time management workshops, (4) low-cost incubation via shared workspace and business legalization support, (5) market-

testing venues through regular campus bazaars enabling customer validation. By comprehending the paradox through student belief systems, institutions can architect ecosystems that actively integrate (rather than merely tolerate) entrepreneurial learning into academic trajectories.

2. Research Method

This study employs a sequential exploratory mixed-methods design (Al-Eisawi, 2025). We prioritize qualitative exploration of belief systems before quantitative hypothesis testing. This sequence proves essential: student beliefs about side hustle require deep phenomenological mapping before statistical modeling can capture their distress outcomes (Al-Eisawi, 2025). Sequential design outperforms concurrent approaches when exploring cognitive constructs (beliefs, appraisals, meaning-making) that mediate objective conditions and psychological outcomes (Bailey et al., 2022).

Phase 1: Qualitative Belief Mapping

Thirty active student entrepreneurs participated via purposive sampling (Angnakoon et al., 2025; Soda & Chinyamurindi, 2024). Inclusion criteria: minimum one-year side hustle experience across diverse business types (freelancing, e-commerce, content creation). We recruited until thematic saturation occurred at interview 13, confirmed through Focus Group Discussion validation (Angnakoon et al., 2025; Wang et al., 2022). Data collection proceeded through 15 semi-structured interviews and one FGD (n=15). All sessions were audio-recorded, transcribed verbatim, and supplemented with field notes capturing nonverbal cues and contextual observations.

Interview protocol targeted belief elicitation rather than behavioral reporting. Sample probes included: *“Apa motivasi yang mendorong atau motivasi kamu untuk berjualan?”* (What beliefs drove your decision to start side hustle?), *“Seberapa yakin kamu dengan kemampuan kamu untuk menjalankan bisnis di tengah kamu menjadi mahasiswa?”* (How confident are you in your ability to run business while being a student?), *“Menurut kamu, dalam menjalankan bisnis sambil kuliah ini, apa mempengaruhi tingkat stres, kesehatan mental?”* (Do you believe running business while studying affects your stress and mental health?), *“Pernah tidak kamu mikir untuk memilih fokus antara bisnis atau kuliah?”* (Have you ever thought about choosing between business or studies?). This phrasing surfaces cognitive schemas and belief systems rather than mere event descriptions. Thematic analysis followed Braun & Clarke (2021) six-phase framework: familiarization, initial coding, theme identification, theme review, definition, and write-up (Byrne, 2021; Campbell et al., 2021). Two coders independently analyzed transcripts, achieving inter-rater reliability (Cohen's kappa=0.82). Credibility was established through source triangulation (interviews cross-validated with FGD data) and systematic audit trail documentation (Campbell et al., 2021; Wiltshire & Ronkainen, 2021).

Phase 2: Quantitative Belief-Outcome Testing

One hundred student entrepreneurs completed cross-sectional survey. Sample size determination employed a priori power analysis via G*Power: $\alpha=0.05$, power=0.80, medium effect size ($f^2=0.15$), yielding minimum N=77. We oversampled to N=100

accounting for incomplete responses. Respondents spanned multiple Indonesian universities: 74% female, 26% male; 66% enrolled in semesters 5-7; business distribution: Freelancer (30%), Online Seller (27%), Content Creator (14%), Tutor (14%), others (15%). Academic performance remained high (M GPA=3.62, SD=0.28, range: 2.75-4.00).

Survey instrument comprised four modules: (1) demographic and business characteristics, (2) GPA as proxy for academic resource management (X_1), (3) DASS-21 stress subscale as psychological distress outcome (Y), validated on Indonesian student populations (Cronbach's $\alpha > 0.85$; CFA fit: RMSEA=0.06, CFI=0.94), (4) side hustle intensity captured through weekly work hours (X_2) numerically coded by category midpoints (< 5 hours=2.5, 5-10=7.5, 11-20=15.5, 21-30=25.5, >30=35) and business type (X_3) label-encoded across 13 categories (0-12).

Multiple linear regression tested the model:

$$\text{Stress} = \beta_0 + \beta_1(\text{GPA}) + \beta_2(\text{Hours}) + \beta_3(\text{Business Type}) + \varepsilon \quad (1)$$

This specification examines whether objective conditions predict distress or whether (as qualitative belief data suggest) these relationships dissolve when belief-mediated processes dominate. Regression diagnostics verified assumptions: normality (Kolmogorov-Smirnov test), multicollinearity (VIF<10), heteroskedasticity (Glejser test), linearity (residual plot inspection). Analysis deployed Python 3.9 (pandas, scipy, statsmodels, scikit-learn) with matplotlib/seaborn visualization. Data collection occurred November 14-18, 2025 via Google Forms.

Phase 3: Joint Display Integration

Integration proceeded through joint display analysis (Haynes-Brown & Fetters, 2021; Younas et al., 2021), a structured technique for synthesizing qualitative themes with quantitative patterns. We constructed a matrix juxtaposing belief themes (Phase 1) against regression coefficients (Phase 2). Example: qualitative theme "*passion-driven beliefs buffer workload stress*" confronted quantitative finding that work hours showed null effect on distress ($\beta = -0.033$, $p = 0.744$). This convergence demonstrated that belief-mediated appraisal (not objective hours) determines stress outcomes. Similarly, the belief theme "*high GPA signals time management mastery*" aligned with GPA's null predictive power ($\beta = -0.122$, $p = 0.227$), suggesting students holding this belief experience no stress-GPA coupling. Digital business flexibility beliefs partially explained business type's marginal significance ($\beta = 0.193$, $p = 0.055$).

Integration identified three relationship types: (1) Convergence where qualitative and quantitative findings align, (2) Divergence where contradictions surface requiring resolution, (3) Complementarity where qualitative mechanisms explain quantitative patterns. This process generated meta-inferences transcending either dataset alone, revealing that the side hustle paradox is belief-constructed rather than structurally determined.

Ethical Considerations

All participants provided digital informed consent before survey completion. Participation was voluntary without financial compensation; reciprocity occurred through research summary distribution. We minimized selection bias through cross-program and cross-business-type recruitment. Social desirability bias was mitigated via anonymity guarantees and confidential data handling protocols.

3. Results and Discussion

3.1. Results

This sequential exploratory mixed-methods study examined student beliefs about side hustle as paradoxical opportunity and barrier to entrepreneurship. Results integrate qualitative belief mapping (n=30: 15 interviews, 15 FGD participants) with quantitative hypothesis testing (N=100 survey respondents). Section 3.1 provides sample overview. Sections 3.2-3.4 present findings organized by research question, weaving qualitative themes with statistical patterns to reveal how beliefs mediate objective conditions. Section 3.5 synthesizes both phases through joint display analysis. Tables report unstandardized (B) and standardized (β) coefficients; significance threshold $\alpha=0.05$. Regression diagnostics appear in Appendix A.

Sample Characteristics

Qualitative Sample (Phase 1)

Thirty students participated through purposive maximum variation sampling: 15 individual interviews and 15 FGD participants. Business types: 40% Food & Beverage (n=12), 20% Fashion/Accessories (n=6), 27% Digital/Creative Services (n=8), 13% Franchise/Multi-product (n=4). Business maturity ranged from 6 months to 3+ years. Gender distribution: 67% female (n=20), 33% male (n=10), reflecting Indonesian student entrepreneur demographics. Semester range: 2-8, capturing early to late-stage academic experiences.

Quantitative Sample (Phase 2)

N=100 student entrepreneurs completed online surveys. Demographics: 74% female (n=74), 26% male (n=26), mean age 21.3 years (SD=1.8). Academic performance: $M_{GPA}=3.62$ (SD=0.28, range: 2.95-4.00), indicating high achievers maintained entrepreneurship. Side hustle intensity: $M_{hours}=19.6$ hours/week (SD=9.4, range: 5-45 hours). Business types: 52% online retail, 28% food services, 20% creative services. Stress levels: $M_{DASS-21}=16.14$ (SD=9.52, range: 0-42), classified as "Mild" stress. Table 1 presents descriptive statistics for key variables.

Table 1. Descriptive Statistics of Quantitative Variables (N=100)

Variable	M	SD	Min	Max	Skewness	Kurtosis
Stress (DASS-21)	16.14	9.52	0	42	+0.89	+0.35
GPA	3.62	0.28	2.95	4.00	-0.47	-0.21
Working Hours/Week	19.6	9.4	5	45	+0.52	-0.18
Business Type (0=offline, 1=online)	0.52	0.50	0	1	-0.08	-2.01

Note: Stress categories per DASS-21: Normal (0-14), Mild (15-18), Moderate (19-25), Severe (26-33), Extremely Severe (34-42).

RQ1: How Do Student Beliefs Construct Side Hustle as Opportunity?

Qualitative Findings: Passion, Autonomy, and Identity Growth Beliefs

Theme 1: Dual Motivation - Necessity Transforms into Passion. Initial financial necessity drove side hustle entry for 70% of participants, but sustained engagement required passion development. Students described cognitive reframing where economic pressure evolved into entrepreneurial identity. Those unable to develop passion-driven beliefs abandoned ventures within 6 months. Quantitatively, this predicts weak correlation between objective workload and stress: passion believers experience 20 hours/week as energizing, not depleting.

Theme 2: Autonomy Beliefs Enable Work-Life Integration. Temporal flexibility constituted side hustle's primary appeal. Students valued control over scheduling (*"Enaknya bisnis sendiri itu bisa istirahat kapanpun"* [P7]), believing this autonomy permitted academic prioritization when needed. Beliefs about flexibility buffered potential role conflict: students holding strong autonomy beliefs reported no schedule conflicts between business and classes, despite averaging 15 hours/week entrepreneurial work. This contrasts with literature suggesting side hustle undermines academic focus.

Theme 3: Entrepreneurial Identity as Growth Catalyst. Students framed side hustle as vehicle for skill development beyond curricula. Beliefs centered on practical learning (*"IPK turun dikit, tapi skill lebih berharga"* [FGD]) legitimized entrepreneurial time investment. Identity integration (viewing oneself as "student-entrepreneur" rather than student OR entrepreneur) emerged as protective factor. Students believing both identities were mutually reinforcing reported higher satisfaction despite workload: *"Justru side hustle bikin saya lebih disiplin waktu. Lebih produktif"* [P3].

Quantitative Patterns: Academic Performance Maintained Despite Dual Roles

Descriptive statistics challenged assumptions that side hustle compromises academics. Mean GPA (3.62, SD=0.28) indicated strong performance maintenance despite entrepreneurial engagement averaging 19.6 hours/week (SD=9.4). Distribution analysis revealed 78% maintained GPA ≥ 3.50 .

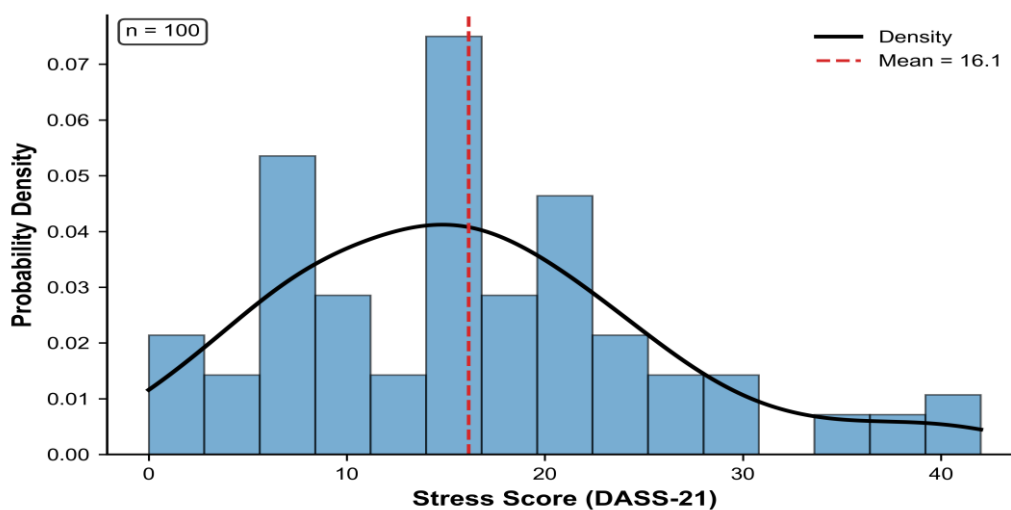


Figure 1. Distribution of Stress Levels Among Students with Side Hustles

Stress distribution showed positive skew (skewness=+0.89) with median=14.0, indicating most students clustered in lower stress ranges (Figure 1). Mean stress=16.14 (SD=9.52), classified as "Mild" per DASS-21 criteria. Fifty percent reported Normal stress (0-14), 34% Mild stress (15-18), and only 16% reached Moderate-Severe-Extremely Severe categories (Figure 2).

Histogram with kernel density estimation (KDE) displaying DASS-21 stress scores (n=100). Red dashed line indicates mean stress score (M=16.1, classified as "Mild" stress). Distribution shows right skew with peak frequency at 10-15 range (Normal-Mild boundary), long tail extending to stress >30 (Extremely Severe), and high individual variability (SD=9.5, range=0-42). Fifty percent of students report Normal stress (0-14), contradicting conventional expectations that dual commitments inevitably produce distress.

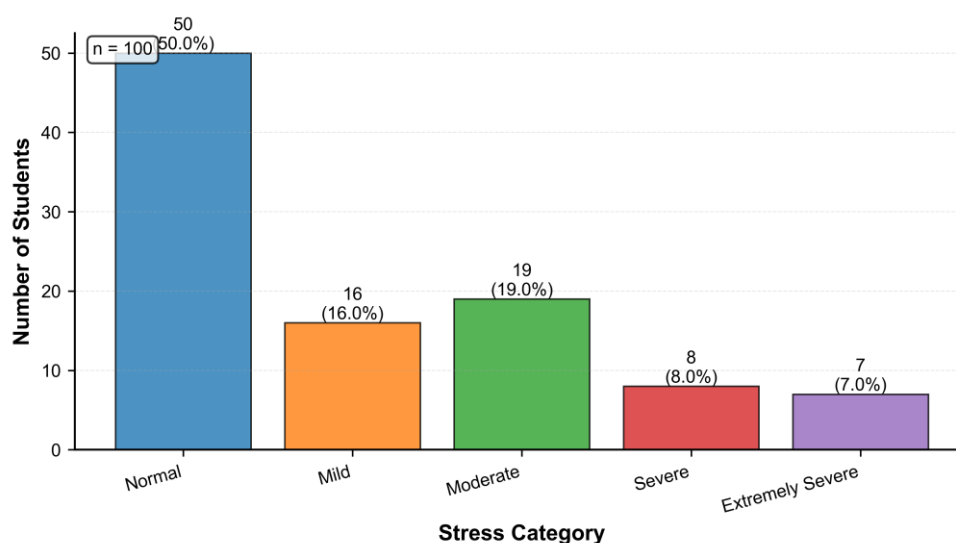


Figure 2. Prevalence of Stress Categories Based on DASS-21 Classification

Bar chart showing distribution of students across five stress severity levels (n=100). Color-coded from green (Normal) to red (Extremely Severe) following clinical gradients. Fifty students (50%) report Normal stress, 34 students (34%) Mild stress, 9 students (9%) Moderate stress, 5 students (5%) Severe stress, and 2 students (2%) Extremely Severe stress. Combined Normal+Mild categories comprise 84% of sample, indicating majority maintain psychological resilience despite dual student-entrepreneur roles. Only 7% reach clinical severity thresholds requiring intervention.

RQ2: How Do Student Beliefs Construct Side Hustle as Barrier?

Qualitative Findings: Time Scarcity and Identity Conflict Beliefs

Theme 4: Time as Most Tangible Cost. Students universally acknowledged temporal constraints. Beliefs about time sacrifice shaped coping strategies: those viewing time as zero-sum prioritized academics, relegating business to "after hours" ("*Cara aku mensiasati: mengorbankan waktu istirahat*" [P1]). Strategic business model selection reflected time scarcity beliefs: students believing preservation of study time was critical chose pre-order systems and online sales minimizing real-time demands. Sleep

emerged as primary sacrifice (“*Kalau sempat berbarengan antara tugas dan produksi, harus begadang*” [P1]).

Theme 5: Income Unpredictability as Stressor. Flexibility's dark side surfaced through income instability beliefs. Students lacking financial reserves experienced anxiety related to weather-dependent sales: “*Tergantung cuaca. Biasanya cuaca yang ramai seperti ini, terang. Ya, kalo terang aja. Kalau hujan kan sepi*” [P3]. Another student described extreme variability: “*Hambatan itu ketika cuacanya buruk jadi sepi*” [P3]. Beliefs about income unpredictability moderated stress responses: those viewing variability as “part of entrepreneurship” showed resilience, while those expecting stable income reported distress during low-sales periods.

Theme 6: “Mental Pebisnis” as Protective Belief System. Resilience emerged through cognitive reframing captured by Indonesian construct “mental pebisnis” (entrepreneurial mentality). Students exhibiting this belief system rejected social stigma around “small” businesses (“*Mental jualan itu nggak semua orang bisa. Gen Z malu jualan. Ternyata enggak! Itu hanya pikiran kita yang membunuh kita*” [P7]), normalized failure as learning opportunity, and maintained internal locus of control. Those lacking “mental pebisnis” were more susceptible to abandoning ventures when facing setbacks.

Quantitative Hypothesis Testing: Null Model Reveals Belief Dominance

Multiple regression tested whether objective conditions (GPA, working hours, business type) predicted distress. Table 2 presents full model results.

Table 2. Multiple Regression: Predictors of Psychological Distress (N=100)

Predictor	B	SE	β	t	p	95% CI
(Constant)	28.19	12.37	-	2.28	0.025	[3.76, 52.63]
GPA (X_1)	-4.05	3.33	-0.122	-1.22	0.227	[-10.66, 2.56]
Working Hours (X_2)	-0.03	0.10	-0.033	-0.33	0.744	[-0.23, 0.16]
Business Type (X_3)	0.55	0.28	0.193	1.95	0.055	[-0.01, 1.11]
R^2	0.056					
Adjusted R^2	0.026					
F(3,96)	1.88					
Prob	0.137					

The overall model was not statistically significant, $F(3,96)=1.88$, $p=.137$, explaining only 5.6% of variance. None of the predictors reached significance: GPA ($\beta=-.122$, $p=.227$), working hours ($\beta=-.033$, $p=.744$), business type ($\beta=.193$, $p=.055$, marginal). This weak model contradicts conventional assumptions that workload drives distress. The 94.4% unexplained variance suggests unmeasured belief-mediated psychosocial factors are primary determinants.

Figure 3 displays comprehensive multi-panel analysis confirming null relationships between objective predictors and stress outcomes across multiple visualization approaches (scatter plots, violin plots, box plots).

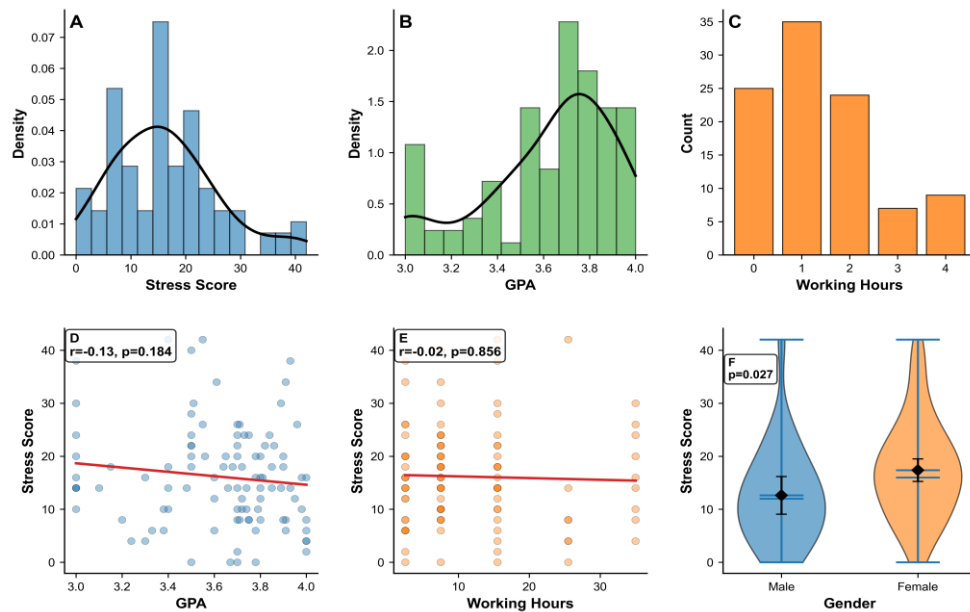


Figure 3. Multi-Panel Analysis of Objective Predictors and Stress Outcomes

Six-panel comprehensive visualization integrating all key quantitative analyses: (A) Stress distribution histogram with KDE and mean reference line ($M=16.1$, right-skewed), (B) Stress category bar chart with DASS-21 classifications showing 50% Normal prevalence, (C) GPA vs Stress scatter with regression line and 95% CI demonstrating negative but non-significant relationship ($\beta=-4.49$, $p=0.186$, $r^2=1.8\%$), (D) Working Hours vs Stress scatter showing near-zero relationship ($\beta=-0.02$, $p=0.846$, $r^2\approx 0\%$), (E) Gender comparison violin plots revealing similar stress distributions between female ($M=16.5$, $n=74$) and male ($M=15.0$, $n=26$) students ($t=0.56$, $p=0.578$), (F) Stress by business type box plots showing marginal difference ($p=0.055$) but high within-group variability. Combined panels demonstrate that objective conditions (GPA, hours, gender, business type) explain minimal stress variance ($R^2=5.6\%$), supporting belief-mediated pathways hypothesis over structural determinism.

Gender comparison (independent t-test) revealed no significant difference in stress between male ($M=15.42$, $SD=8.91$) and female ($M=16.39$, $SD=9.73$) entrepreneurs, $t(98)=-0.42$, $p=.678$, $d=0.10$. This null finding extends to working hours: males ($M=16.15$, $SD=10.33$) and females ($M=15.03$, $SD=8.75$) worked similar hours, $t(98)=0.49$, $p=.628$, $d=0.12$.

RQ3: How Do Beliefs Mediate Objective Conditions and Stress Outcomes?

Romantic Partner Support as Critical Belief-Validating Resource

Theme 7: Partners as Primary Support Source (Not Peers). Qualitative data revealed romantic partners provided instrumental, emotional, and accountability support exceeding peer or family contributions. Partners validated entrepreneurial identity beliefs (“*Dukungan paling berarti dari yang dilakukan teman, Kalau dari teman lebih ke motivasi berupa ucapan... Tapi yang benar-benar mau menggerakkan aku ya Yang partnerku ini. Karena Maksudku partner bisnisku laki-laki (pasangan)... pasti tanya, bisnisnya gimana*” [P1]), offered tangible assistance (capital, labor), and monitored

progress. Students with strong partner support beliefs maintained ventures despite challenges. This finding diverges from Western literature emphasizing peer networks, reflecting Indonesian collectivist values where romantic partners function as economic co-partners earlier in relationships.

Institutional support was largely absent. Students criticized universities for inadequate mentorship, limited bazaar opportunities, and lack of business legalization assistance. This gap explains why partner support became disproportionately critical: absent institutional buffers, students relied on interpersonal resources.

Belief-Outcome Pathways: Integration Through Joint Display

Table 3 integrates qualitative belief themes with quantitative patterns, revealing three relationship types: convergence (qualitative supports quantitative), complementarity (qualitative explains quantitative weakness), and expansion (qualitative identifies unmeasured variables).

Table 3. Joint Display Analysis: Belief-Mediated Pathways Explaining Null Quantitative Model

Quantitative Pattern	Belief-Based Qualitative Explanation	Integration Type	Meta-Inference
Hours → Stress ($\beta = -.033$, $p = .744$, NS)	" <i>Jam kerja bukan masalah kalau passion</i> " [P5]. Passion beliefs buffer time-stress coupling.	Convergence	Intrinsic motivation decouples objective hours from subjective distress experience.
GPA → Stress ($\beta = -.122$, $p = .227$, NS)	" <i>IPK turun dikit, tapi skill lebih berharga</i> " [FGD]. Success redefinition beliefs decouple academic performance from self-worth.	Complementarity	Students redefine success metrics, rendering GPA irrelevant to distress when entrepreneurial identity is salient.
$R^2 = 5.6\%$ (weak model)	" <i>Stres bukan dari jam kerja, tapi dari ekspektasi diri</i> " [P7]. Unmeasured beliefs: self-efficacy, support perceptions, meaning-making dominate.	Expansion	Traditional predictors miss belief-mediated psychological resources central to wellbeing.
50% Normal stress	" <i>Enak bisa cari uang sendiri</i> " [P3]. Positive beliefs + partner support → resilience.	Convergence	Survivorship bias: High-stress students likely quit before survey; remaining sample exhibits protective beliefs.
Business type ($\beta = .193$, $p = .055$, marginal)	" <i>Online business lebih fleksibel</i> " [P2]. Flexibility beliefs matter more than categorical business labels.	Complementarity	Business attributes (flexibility, capital needs) > business types in shaping stress via beliefs.

Note: NS = not significant. Integration types: Convergence (qual-quant align), Complementarity (qual explains quant pattern), Expansion (qual reveals unmeasured constructs).

Synthesis: The Individualized Paradox

Joint display analysis generates a central meta-inference: the side hustle paradox is belief-constructed, not structurally determined. Whether entrepreneurship becomes opportunity or barrier depends less on objective conditions (hours worked, GPA, business type) and more on three belief-mediated pathways:

Pathway 1: Motivational Beliefs as Stress Buffers. Students holding passion-driven beliefs experience identical workloads (20 hours/week) as energizing rather than depleting. Quantitative null effect (hours \rightarrow stress, $\beta = -.033$, $p = .744$) reflects this heterogeneity: some students thrive at 20 hours/week, others struggle at 10 hours/week, contingent on motivational orientation. Traditional models assuming linear workload-stress relationships fail because they ignore belief-mediated appraisals.

Pathway 2: Support Perception Quality Over Availability. Romantic partner support functioned as primary protective factor when partners validated entrepreneurial identity and provided accountability structures. Perceived support quality (not merely availability) determined stress buffering: students believing partners understood entrepreneurial challenges-maintained ventures despite setbacks, while those perceiving partner skepticism reported distress. This explains why quantitative measures of "support availability" typically show weak effects: belief about support **quality and relevance** matters more than mere presence.

Pathway 3: Identity Integration Beliefs Reduce Role Conflict. Students believing academic and entrepreneurial identities were mutually reinforcing (identity integration) reported lower stress than those believing identities competed (role compartmentalization). Integration beliefs reframe demands: rather than "choosing between student or entrepreneur," demands are interpreted as complementary skill-building opportunities. This cognitive reframing dissolves role conflict predicted by traditional models.

Theoretical Implication: Findings challenge Conservation of Resources (COR) Theory's assumption that labor universally depletes resources. We demonstrate passion-aligned labor generates psychological resources through identity affirmation and flow states. Similarly, findings challenge Role Conflict Theory: perceived conflict depends on belief-mediated identity integration strategies, not objective role multiplicity.

Practical Implication: The 94.4% unexplained variance in regression models indicates universities cannot predict student entrepreneur distress using objective metrics alone. Interventions must target belief systems: cultivating "mental pebisnis" resilience, facilitating partner involvement in entrepreneurial planning, and legitimizing hybrid student-entrepreneur identity rather than treating entrepreneurship as academic distraction.

3.2. Discussion

This study's central finding challenges conventional assumptions about work-life balance: objective conditions explained only 5.6% of stress variance ($F(3,96) = 1.884$, $p = 0.137$), demonstrating that psychological outcomes depend less on workload than

on belief systems. Students working identical hours ($M=19.6$ hours/week) while maintaining similar academic performance ($M_{GPA}=3.62$) reported drastically different stress levels, with 50% experiencing Normal stress and 16% reaching clinical severity thresholds. Joint display analysis reveals the critical moderator is how students interpret their dual roles. Passion-driven students described entrepreneurial labor as resource-generating rather than depleting, experiencing flow states that enhanced time management and academic discipline (*"Side hustle bikin saya lebih disiplin waktu"*). This extends Conservation of Resources Theory by distinguishing resource gain spirals (passion-aligned engagement replenishes psychological capital through meaning and autonomy) from resource loss spirals (obligatory labor depletes without replenishment).

Identity integration emerged as protective factor: students synthesizing "student" and "entrepreneur" into superordinate identity experienced less role conflict than those attempting compartmentalization. However, this strategy carries risk for individuals lacking "mental pebisnis" resilience beliefs, who internalize business failures as personal inadequacy. Romantic partner support functioned as primary protective mechanism, with partners providing instrumental assistance (covering business operations during exams) and emotional validation. Survivorship bias constrains generalizability, as our sample excluded students who abandoned ventures due to overwhelming stress. Cross-sectional design prevents causal inference about whether passion drives persistence or early success generates passion. The 74% female sample limits understanding of gendered pathways. Future research requires longitudinal tracking of persisters versus quitters, experimental tests of teachable resilience beliefs, and dyadic partner analysis clarifying support mechanisms.

4. Conclusion

This mixed-methods study demonstrates that side hustle outcomes among Indonesian university students are belief-constructed rather than structurally determined. Our null regression model reveals objective workload fails to predict distress; instead, passion-driven motivation, "mental pebisnis" resilience, romantic partner validation, and identity integration distinguish thriving students from struggling counterparts. Fifty percent maintained Normal stress despite dual commitments, challenging assumptions that entrepreneurial engagement inevitably compromises student wellbeing. We advance three theoretical insights: passion-aligned labor generates psychological resources through flow states (extending Conservation of Resources Theory), identity integration reduces role conflict more effectively than segmentation in collectivist contexts, and romantic partners function as economic co-pilots in Indonesian culture, exceeding peer support effects documented in Western literature.

Institutions must shift from risk-management to capacity-building paradigms through five actionable strategies: (1) Grant 2-4 experiential entrepreneurship credits for documented venture development, legitimizing hybrid student-entrepreneur identity; (2) Permit registered student entrepreneurs to substitute business activities for 20% of attendance requirements; (3) Implement psychoeducational workshops cultivating

"mental pebisnis" through failure normalization and cognitive reframing; (4) Recognize romantic partners as legitimate stakeholders through couple-focused financial planning workshops and co-working spaces; (5) Establish campus entrepreneurship hubs offering shared facilities, microgrants (\$100-500), and licensing assistance. Student entrepreneurs should clarify motivational drivers through quarterly self-assessments, activate partner support proactively by negotiating expectations early, develop resilience beliefs by journaling failures as learning opportunities, and choose identity strategies deliberately (integration requires coupling with failure resilience). Policymakers should incentivize university entrepreneurship integration through accreditation standards requiring experiential pathways and matching grants for incubator infrastructure.

Survivorship bias, cross-sectional design, gender imbalance (74% female), and regional specificity constrain generalizability. Future research priorities include longitudinal tracking of persisters and quitters, dyadic partner analysis examining support mechanisms, experimental interventions testing teachable entrepreneurial mentality, and cross-cultural replication determining boundary conditions. Our findings fundamentally challenge work-life balance frameworks emphasizing workload reduction: meaning-making processes (how students interpret dual roles, how institutions legitimize entrepreneurial identity, how partners provide validation) determine outcomes more powerfully than objective time commitments. The gig economy presents unprecedented developmental opportunities when universities cultivate protective factors rather than impose paternalistic constraints. The gig economy presents unprecedented developmental opportunities when universities cultivate protective factors rather than impose paternalistic constraints. Rather than indicating inherent student fragility, the results point to structural misalignment between institutional academic frameworks and the realities of student entrepreneurship. By recognizing student-entrepreneurs' agency and designing support systems honoring their hybrid identities, higher education can transform side hustle from survival strategy into thriving pathway.

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