SOCIAL PRISM

Volume 3(2), 2026, 517-537
Online ISSN: 3006-8886
Print ISSN: 3006-8878

When Entrepreneurial Plans Meet Fear of Failure: Understanding the Intention–Action Gap among University Students

Ahmad Usman[1], Muhammad Zeeshan Hanif[2], Muhammad Arsalan[3]

[1,2,3]*Institute of Administrative Sciences, University of the Punjab, Lahore. Email: usman.ias@pu.edu.pk*

Abstract

Among students nearing graduation, an intention to start a business does not necessarily indicate that they have begun developing one. Drawing on 567 completed questionnaires from final-year students at six universities in Lahore, this study examines how entrepreneurial intention relates to nascent entrepreneurial action through entrepreneurial alertness and implementation intentions, and whether fear of failure qualifies the planning–action relationship. Established questionnaire measures were combined with a count of seven venture-related activities undertaken in the preceding six months. We assessed the measurement structure and estimated a regression-based conditional serial mediation model, using heteroskedasticity-consistent standard errors and 5,000 bootstrap resamples for indirect associations. Entrepreneurial intention was positively associated with alertness, which was related to more specific implementation plans. Planning was positively associated with completed activities, but this relationship was weaker among students anticipating greater consequences of failure (planning × fear, B = −.225). The serial indirect association was positive at the examined fear levels, declining from .142 at lower fear to .069 at higher fear. The findings distinguish recognizing an opportunity, specifying a next step, and undertaking it when failure is a concern. They extend research on the entrepreneurial intention–action gap, although the cross-sectional data do not establish the proposed temporal sequence.

Keywords: entrepreneurial intention; entrepreneurial alertness; implementation intentions; fear of failure; nascent entrepreneurial action; university students; Pakistan.

Introduction

At university, entrepreneurship is often discussed in terms of students' ambitions to start a business. Those ambitions are important, but they leave a practical question unanswered. Has the student spoken to a possible customer, tested a product idea or sought information needed to begin? Someone who has done these things and someone who has only considered them may express equally strong intentions. Yet they are at different points in trying to develop a venture. Intention-based assessments of entrepreneurship education can consequently overlook an important difference between students who have begun testing an idea and those whose interest has not yet led to an attempt. This distinction also underlies the concerns raised in the reviews by Bae et al. (2014) and Nabi et al. (2017): an attractive entrepreneurial career is not itself evidence of entrepreneurial activity.

Studies have established a relationship between entrepreneurial intention and later behavior, but the relationship is far from automatic. Kautonen et al. (2015) and Shirokova et al. (2016) show that the circumstances in which intentions are pursued deserve attention in their own right. Meoli et al. (2020) likewise place entrepreneurial career decisions within a wider social setting. For a

Received 27 March 2026; Revised 10 April 2026; Accepted 28 April 2026; Published (online) 30 April 2026

Attribution 4.0 International (CC BY 4.0)

Corresponding Author Email: usman.ias@pu.edu.pk

DOI: https://doi.org/10.69671/socialprism.3.2.2026.351

Online ISSN: 3006-8886
Print ISSN: 3006-8878

student approaching graduation, the issue is not only whether a venture is attractive. It is also whether an opportunity has become sufficiently clear to pursue, whether a next step has been chosen and whether the student is prepared for an unfavorable response. These considerations lead us to examine the organization and enactment of intention rather than its formation alone.

An informative starting point is the work of Alshahrani et al. (2026), who examined entrepreneurial intention and behavior through alertness and entrepreneurial self-efficacy among aspiring entrepreneurs in Saudi Arabia. Their findings direct attention to what happens between wanting to start a venture and undertaking entrepreneurial activities. We extend that question by considering implementation intentions instead of self-efficacy as the second link. Confidence that one could establish a business is not the same as deciding on a particular step and identifying the circumstances for taking it. Nor does a detailed plan ensure action. Fear of failure may become especially important at this last point, when a proposed activity exposes the student to an unfavorable response.

For final-year students, early venture activity frequently takes place alongside coursework and decisions about employment. A business student may begin with interviews about a service, while a computer science student may have a working prototype before meeting a customer. Neither activity necessarily means that a firm has been established. This makes nascent entrepreneurial action a more appropriate outcome than venture ownership or performance: it concerns identifiable steps toward developing an opportunity, including steps that may eventually lead the student to abandon an unpromising idea (Gieure et al., 2020).

Lahore offers an empirical setting in which the intention–action distinction can be examined among final-year students from different disciplinary backgrounds. The university context covered the University of the Punjab, University of Central Punjab, University of Management and Technology, COMSATS University Islamabad's Lahore campus, FAST–National University of Computer and Emerging Sciences' Lahore campus, and the National College of Business Administration and Economics. The study focuses on students in their final two semesters of management, business administration, commerce, business and information technology, and computer science programmes, where offered. The institutional coverage does not imply that the sample represents all Pakistani undergraduates or the enrolment composition of these universities.

There is good reason not to present the psychological obstacles to entrepreneurship as unexplored in Pakistan. Studies by Ahmed et al. (2021) and Ahmed (2022) have already examined family support, self-efficacy and entrepreneurial intentions among Pakistani students. Sajjad and Talat (2024) also consider fear and family support in a Lahore student setting. These contributions largely concern the formation of intention, however, whereas our focus is on what student's report doing after an opportunity has been noticed and a next step considered. The distinction is important because fear is not necessarily a simple deterrent. It can discourage exposure to failure, but may also prompt care and preparation, as discussed by Cacciotti and Hayton (2015) and Morgan and Sisak (2016). The present model examines the circumstances in which the discouraging association is expected to be stronger.

Two perspectives inform our argument. The theory of planned behavior explains why entrepreneurial intention should matter for subsequent effort; action phase theory distinguishes a

Online ISSN: 3006-8886
Print ISSN: 3006-8878

decision to pursue a goal from preparations for acting on it. We connect those perspectives by examining how students recognize a possible opportunity and identify a practical next step. The proposed relationship between planning and reported activity is then examined at different levels of anticipated failure. Our data allow these associations to be assessed together, but not the sequence in which each student experienced them.

Theoretical framework and hypotheses

Intention formation and the organization of action

In the theory of planned behavior, intention is the immediate motivational antecedent of behavior (Ajzen, 1991). Yet intending to undertake a task does not remove the conditions that make it difficult. Armitage and Conner (2001) document the relevance of intention across behavioral domains; for entrepreneurship, the remaining question is what an intending individual actually prepares and attempts. We draw on this perspective without testing the full set of attitudes, subjective norms and perceived behavioral control. Fear of failure is also not treated as a proxy for perceived control. Judging whether one can approach a customer differs from anticipating the personal consequences if that approach is unsuccessful (Ajzen, 2002).

Entrepreneurial intention has long been understood as a way of directing effort towards venture creation (Bird, 1988; Krueger et al., 2000). Reviews by Liñán and Fayolle (2015) and the synthesis by Schlaegel and Koenig (2014) show how extensively its antecedents have been examined. Nevertheless, a student may be committed to entrepreneurship without having chosen a market problem or decided on a first undertaking. The distinction is consequential for research that uses intention as its principal outcome. Following the broader agenda discussed by Fayolle and Liñán (2014), we consider not another antecedent of intention but the preparation that may accompany it and the venture activities respondents report having undertaken.

Action phase theory draws attention to the work that follows the decision to pursue a goal. Heckhausen and Gollwitzer (1987) distinguish deliberation about a goal from preparing its implementation. For Gollwitzer (1999), an implementation intention links a recognizable situation to an intended response; the point is to settle part of the decision before that situation occurs. Gollwitzer and Sheeran (2006) review evidence on deliberately forming such plans. Here, the interest is in plans students already report having made, not the effect of instructing them to create a plan during an intervention.

The phases need not unfold in the same order for every prospective entrepreneur. An exploratory customer conversation could give a previously uncertain business ambition a clearer direction. Equally, access to a family contact might make an initial step possible before much formal preparation has occurred. Sheeran (2002) and Sheeran and Webb (2016) document the distance that often remains between intention and behavior. In their intervention review, Webb and Sheeran (2006) also find that a change in intention is not matched by an equivalent change in behavior. The sequence proposed here is therefore a theoretically informed set of associations, not a history of the decisions made by individual respondents.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

Entrepreneurial intention and alertness

An entrepreneurial ambition does not itself supply a business opportunity. Kirzner (1997) placed discovery at the centre of the market process; Baron (2006) described the part played by recognizing connections and patterns in information. Shane and Venkataraman (2000) likewise emphasized the meeting of opportunities and individuals able to recognize them. For a final-year student, the distinction is practical. Wanting to establish a business may lead to reading about markets and technology, but recognizing a problem that customers might pay to solve requires a further judgment. We therefore consider alertness separately from intention rather than treating it as another name for entrepreneurial motivation.

Tang et al. (2012) describe entrepreneurial alertness in terms of scanning and search, association and connection, and evaluation and judgment. A student may collect information about a market without seeing any promising opportunity in it. Another may recognize a connection between a technical skill and a customer problem but still be unsure whether the idea is commercially worthwhile. Evaluation becomes important at that point. We expect students with stronger entrepreneurial intentions to pay closer attention to information that could help them enter a market, not merely to acquire more information in general. The three dimensions of alertness therefore have distinct roles in the process being examined.

This ordering is not the only one that could occur. A student might discover an unmet need while completing a university project and only then consider starting a business. Experience and family contacts could influence both interest in entrepreneurship and the opportunities noticed. We nonetheless test the intention-directed ordering examined by Alshahrani et al. (2026), because a prior commitment to entrepreneurship may affect what students seek and recognize in their environment. The questionnaire establishes whether these responses are associated; it cannot reconstruct which came first for an individual student.

H1. Entrepreneurial intention is positively associated with entrepreneurial alertness.

Alertness and implementation intentions

The relationship between alertness and implementation planning depends on what students do with the opportunities they notice. A person may follow developments in a market, recognize several possible customers and still be unable to identify an initial venture task. As Gielnik et al. (2014) suggest, acquiring information and identifying an opportunity from it are not equivalent. For the present model, the relevant judgment is whether a particular possibility has become definite enough to investigate. Once a problem and a prospective customer group have been identified, a student can decide what evidence is needed and which first contact or experiment would provide it. We therefore expect the recognition and assessment of opportunities to accompany more specific plans, rather than assuming that greater information search necessarily produces action.

This distinction also helps separate implementation intentions from conventional business planning. Van Gelderen et al. (2018) focus attention on specifying an initial entrepreneurial step and the circumstances in which it could be attempted. A student could prepare a substantial written plan without deciding when to approach a customer. Another could arrange an initial

Online ISSN: 3006-8886
Print ISSN: 3006-8878

conversation without writing a business plan at all. In both cases, the question for implementation intentions is whether the next undertaking has been made sufficiently concrete. The measure consequently addresses planning specificity, while alertness concerns recognizing and evaluating opportunities and the action index records activities already completed.

The proposed alertness–planning relationship depends as much on evaluation as on search. A student who continually identifies possibilities may have difficulty settling on one that merits an initial test. Tang et al.'s account gives evaluation and judgment a distinct place for this reason, and Neneh (2019) shows that alertness need not translate uniformly into entrepreneurial behavior. In the present model we expect the ability to notice and assess an opportunity to be associated with a clearer next step. More information alone would not necessarily provide the same benefit.

H2. Entrepreneurial alertness is positively associated with implementation intentions after accounting for entrepreneurial intention.

Implementation intentions and nascent action

Recognising a potentially worthwhile opportunity and testing it are different decisions. McMullen and Shepherd (2006) locate entrepreneurial action in the move from evaluating a possibility to doing something about it under uncertainty. Implementation intentions may help make that move practicable. A student who has decided whom to approach about a service can conduct a customer conversation without knowing whether the service will succeed. Even an unfavorable answer can be useful, because it gives the student evidence that could not have been obtained by continuing to consider the idea privately.

The result of an early test may be a revised opportunity rather than a new business. A customer may reveal that the original problem was misunderstood; a prototype may prove more useful to a different group of users. Frese and Gielnik (2014) describe this adjustment of behavior through feedback as part of action regulation. Evidence on entrepreneurship training also connects doing with learning (Gielnik et al., 2015), and Rauch and Hulsink (2015) argue for including actual behavior when evaluating entrepreneurship education. A student who stops pursuing an idea after such an exercise may have learned something important. The present index records whether activities took place, but cannot tell whether respondents made good use of the information obtained.

Not every venture-related activity is preceded by deliberate opportunity search and planning. Students may act on earlier experience, advice or an opportunity first encountered through someone they know. The equations therefore retain the shorter relationships from intention to planning and action and from alertness to action. H4 concerns the indirect association that passes through both alertness and implementation intentions, alongside these other plausible routes; it is not a claim that all entrepreneurial action follows a uniform sequence.

H3. Implementation intentions are positively associated with nascent entrepreneurial action after accounting for entrepreneurial intention and alertness.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

H4. Entrepreneurial intention has a positive serial indirect association with nascent entrepreneurial action through entrepreneurial alertness and implementation intentions.

Fear of failure at the point of execution

Failure can be threatening even when a student believes that a proposed activity has a reasonable chance of success. What matters may be the personal meaning of an unsuccessful attempt: losing money contributed by relatives, disappointing others or facing public criticism. Conroy et al. (2002) approach fear of failure through appraisals of adverse consequences, and Elliot and Church (1997) distinguish the motives involved in approaching achievement and avoiding failure. We draw on these distinctions to keep anticipated failure separate from an estimate of business risk or a judgment of entrepreneurial competence. Fear in the present model refers to expected consequences, not to an objectively measured probability of failure.

Fear of failure has a more complicated place in entrepreneurship than a simple tendency to avoid risky decisions. Cacciotti et al. (2016) locate fear within the experience of pursuing a venture, while Cacciotti et al. (2020) describe several cognitive and emotional aspects of that experience. Final-year students are not all at the same stage. Some may be imagining the consequences of a first attempt, whereas others have already tested an idea and received feedback. The measure in this article concerns the adverse consequences they anticipate if an entrepreneurial attempt fails. It should not be read as though it captures the full experience of fear among people who already operate businesses.

The difficult part of an initial venture step may begin when the idea leaves the classroom. A customer can decline an interview; a potential partner can question the proposal; an early prototype can receive an unwelcome response. Although implementation intentions help students decide when and how to approach such encounters, they cannot make the responses favorable. Students who associate failure with financial strain, criticism or disappointment may prefer to continue preparing an idea rather than expose it to a test. In these circumstances, even a carefully specified plan may be associated with relatively little completed activity: knowing how to approach someone does not remove the perceived cost of receiving an unfavorable answer.

A negative relationship between fear and the overall number of activities would not, by itself, support our moderation argument. The planning–action association could be equally strong at different fear levels even if more apprehensive students were generally less active. H5 asks a different question: does the amount of reported activity associated with a more definite plan diminish as anticipated consequences become more serious? Van Gelderen et al. (2015) discuss the difficulty of enacting entrepreneurial intentions when doubt or fear accompanies a contemplated step. Their argument directs attention to the interaction between preparation and anticipated consequences, which the regression tests separately from fear's main association with activity.

There is also a reason to expect the opposite pattern. Anticipating an expensive mistake could encourage students to investigate costs, rehearse a customer approach or choose a limited initial trial. Under those circumstances, a clear implementation plan might matter more, not less, for a student concerned about failure. We nevertheless expect the prospect of rejection or loss to make the planned encounter harder to undertake. The distinction may depend on what the student has

Online ISSN: 3006-8886
Print ISSN: 3006-8878

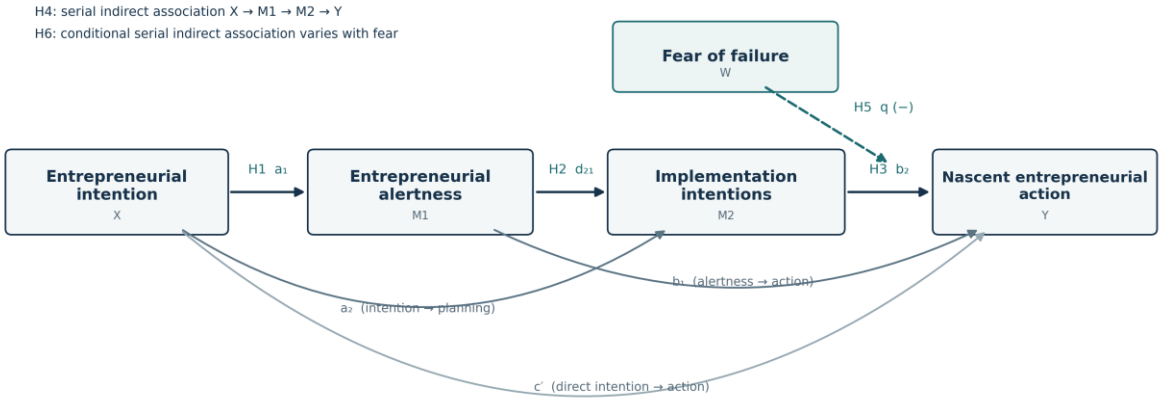
planned: collecting information privately is not the same undertaking as requesting financial support. H5 therefore concerns the total across seven activity domains, without presuming the same relationship for every type of activity.

H5. Fear of failure negatively moderates the association between implementation intentions and nascent entrepreneurial action, such that the association is weaker at higher fear.

H6. The positive serial indirect association between entrepreneurial intention and nascent entrepreneurial action through alertness and implementation intentions is weaker at higher fear of failure.

Figure 1 represents the proposed serial association from intention to action through alertness and implementation intentions. The model also retains the shorter paths from intention to planning and action, and from alertness to action. Fear of failure moderates the planning–action path. The additional relationships were estimated so that the serial association would not stand in for every route through which students may begin entrepreneurial activity (Edelman et al., 2016; Saeed et al., 2015).

Figure 1 Conceptual framework: second-stage moderated serial mediation



Note. Solid arrows identify the hypothesized serial sequence; additional curved arrows show direct pathways retained in the regression equations. Fear of failure moderates the implementation intentions–action path (H5). H4 is the serial indirect association and H6 its dependence on fear. Institutional indicator variables and the fear main effects in the mediator equations are omitted from the figure for readability.

Method

Research design and study sample

The study drew on a cross-sectional survey of 567 final-year students in Lahore. Respondents came from six universities and were enrolled in management, business administration, commerce, business and information technology, or computer science programmes. Institutional

Online ISSN: 3006-8886
Print ISSN: 3006-8878

indicators were included in the regression equations to adjust for differences across the six groups. Because the sample was not weighted to institutional enrolment, it is used to examine associations among the participating students, not to estimate how common venture activity is among students in Lahore or Pakistan.

The 567 cases include students who had not undertaken any of the seven recorded activities. They belong in this analysis because having an entrepreneurial intention without a reported venture step is part of the phenomenon under study. The questionnaire distinguished general commitment to entrepreneurship from identifying a particular next task. Both answers describe the student at the survey date, whereas completed activities were recalled for the preceding six months. A reported plan could thus have been in place before an activity or developed after the student had already made an attempt.

Measures and operationalization

The questionnaire measured entrepreneurial intention, entrepreneurial alertness, implementation intentions and anticipated failure appraisals, together with activities undertaken toward a proposed venture. The distinction between entrepreneurship and course-related work was important in this setting. For the activity count, the relevant referent was work directed at developing a new business initiative rather than completing an assignment or assisting an established family business.

Entrepreneurial intention was assessed with the six-item measure of Liñán and Chen (2009), using seven response categories. The items capture commitment to becoming an entrepreneur rather than a date for beginning a particular venture. Since the activity questions referred to the preceding six months, the intention score was interpreted as general entrepreneurial commitment. This distinction is consistent with Ajzen's (2020) emphasis on the behavioral referent of intention measures and is one reason for treating implementation intentions separately.

Entrepreneurial alertness was assessed with Tang et al.'s (2012) 13 indicators: six for scanning and search, three for association and connection, and four for evaluation and judgment. Responses used seven ordered categories. The confirmatory analysis treated the three dimensions as separate, correlated factors. In the regressions we represented overall alertness by the mean of all 13 items, a straightforward scoring rule that gives the six search items a larger collective contribution. To examine the importance of this choice, an alternative analysis used the mean of the three-dimension scores. Neither scoring method, by itself, demonstrates that alertness is a single higher-order factor.

Implementation intentions were measured with three items adapted from van Gelderen et al. (2018), answered on a six-category scale. The items ask about a particular venture-related step and the conditions under which the respondent expects to undertake it. Someone may have decided to contact a customer without yet making the contact. The score consequently describes how specifically an intended action has been planned; it is not a behavioral outcome or the result of an assigned if–then planning exercise.

Fear of failure was measured with five items adapted from Conroy et al.'s (2002) Performance Failure Appraisal Inventory. On the five-category response scale, students indicated how

Online ISSN: 3006-8886
Print ISSN: 3006-8878

seriously they anticipated the consequences of an unsuccessful venture-related attempt. These responses describe expectations, not previous business failures. They also represent a narrower aspect of fear than the broader entrepreneurial experience examined by Cacciotti et al. (2020). Accordingly, the moderator in our model concerns the personal consequences students expect from failure; it does not measure the objective risk of a venture or all forms of entrepreneurial anxiety.

Nascent entrepreneurial action was recorded across seven activity domains informed by Gieure et al. (2020) and Alshahrani et al. (2026): market or competitor research, venture-plan preparation, product or service development, marketing or promotion, obtaining resources, financial preparation, and making venture-related contacts. Each domain was coded one if the student reported completing an activity during the previous six months and zero otherwise. The total, ranging from zero to seven, describes the breadth of venture activity reported rather than its quality, commercial outcome or financial scale.

The seven activity domains were combined as a count rather than a reflective psychological scale. Developing a product and speaking with potential customers are different kinds of work, and their relevance may vary across ventures. We therefore did not apply alpha, omega or average variance extracted to this index. Its advantage is an interpretable record of the number of completed activity domains; its limitation is that activities requiring very different amounts of effort receive equal weight.

Measures drawn from published research still require careful interpretation in a student sample. Business and computing students may understand venture preparation differently, and anticipated failure may carry financial, family or academic meanings. These contextual differences have been raised in work on entrepreneurship education and technical students (Nowiński et al., 2019; Souitaris et al., 2007). Our reliability and factor results assess relationships among the questionnaire items; equivalence of the measures across disciplines was not separately tested.

Data analysis

We first assessed the psychological measures through confirmatory factor analysis. Twenty-seven indicators were assigned to six correlated factors: entrepreneurial intention, scanning and search, association and connection, evaluation and judgment, implementation intentions, and anticipated failure appraisals. Each indicator loaded on its designated factor, factor variances were fixed at one, and residual correlations were constrained to zero, yielding 309 degrees of freedom. Comparison models combined the alertness facets, combined intention and planning, or specified one general factor. The seven completed activities were not included because they form a count of different behaviors rather than reflective indicators.

We estimated the confirmatory measurement model by maximum likelihood, treating the ordered responses as approximately continuous. Fit was considered from χ^2, CFI, TLI, RMSEA and SRMR rather than any single statistic (Hu & Bentler, 1999). Cronbach's alpha describes internal consistency, and average variance extracted summarises the standardized variance accounted for by the specified factors (Dunn et al., 2014; Fornell & Larcker, 1981). The factor analysis

Online ISSN: 3006-8886
Print ISSN: 3006-8878

evaluates the questionnaire measurement structure. For the subsequent conditional process regressions, the constructs were represented by their observed composite scores.

The hypotheses were examined through three regression equations for entrepreneurial alertness (M1), implementation intentions (M2), and nascent entrepreneurial action (Y). Entrepreneurial intention served as X and fear of failure as W. The equations included the serial X–M1–M2–Y route, additional X–M2, M1–Y and X–Y paths, and a planning × fear interaction in the action equation. Fear was also included in the mediator equations, and five institutional indicators were entered as controls. This is a second-stage moderated serial mediation specification of the kind represented by Hayes' PROCESS Model 87, with the additional covariate terms described explicitly. Unstandardized regression coefficients and HC3 heteroskedasticity-consistent standard errors are reported (Long & Ervin, 2000).

For the proposed serial route, the conditional indirect association is $a_1 d_{21}(b_2 + qw)$. Here, a_1 denotes the intention–alertness slope, d_{21} the alertness–planning slope, b_2 the planning–action slope at mean fear, and q the planning × fear coefficient. Following Hayes (2015), we express the change in that indirect product for a unit difference in fear as $a_1 d_{21} q$, the index of moderated serial mediation. Conditional products are presented at the mean of fear and one standard deviation on either side. The percentile intervals were obtained from 5,000 bootstrap resamples, with sampling conducted separately within the institutional groups to retain their observed sizes.

H5 is evaluated from the planning × fear coefficient in the action equation; H6 concerns the dependence of the serial indirect product on fear. These are not tests of whether one simple slope happens to be significant while another is not. Comparing significance decisions would not establish that the slopes differ (Preacher et al., 2007). There is also a limit to what the fitted order of relationships can tell us: respondents described their intentions, plans and appraisals at the survey date, whereas the activity questions covered the previous six months. The estimates therefore cannot reconstruct the order in which these experiences occurred (Maxwell & Cole, 2007; Conway & Lance, 2010; Podsakoff et al., 2003).

The action outcome records how many of seven entrepreneurial activity domains a respondent had completed. The count consequently has a lower bound of zero and an upper bound of seven. Linear regression makes the coefficients convenient to interpret as differences in numbers of activity domains, but its fitted values are not required to remain within those limits. We interpret the estimates as relationships with the breadth of reported venture work, not as evidence about its quality or commercial success.

Results

Distributions and measurement structure

Respondents had completed an average of 2.571 entrepreneurial activity domains (SD = 1.812). Of the 567 students, 69 reported none and 14 reported all seven. The largest bivariate correlation with the activity count was for implementation intentions (r = .629); entrepreneurial intention (r = .506) and alertness (r = .504) showed similar positive correlations, while fear of failure was negatively correlated (r = −.267). The matrix in Table 1 describes these pairwise relationships.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

Whether they are also present when the other predictors are considered is examined in the regression results below.

Table 1 Descriptive statistics and Pearson correlations

Construct	Mean	SD	1	2	3	4	5
Entrepreneurial intention	3.969	1.333	1.000	—	—	—	—
Entrepreneurial alertness	3.970	1.188	0.484	1.000	—	—	—
Implementation intentions	3.460	1.250	0.472	0.512	1.000	—	—
Fear of failure	3.026	0.999	-0.153	-0.120	-0.178	1.000	—
Nascent entrepreneurial action	2.571	1.812	0.506	0.504	0.629	-0.267	1.000

Note. N = 567. Intention and alertness use seven categories; planning six; fear five. Action ranges from zero to seven completed activity domains. Correlations are descriptive.

Internal consistency ranged from .816 to .908 across the six psychological factors; AVE ranged from .576 to .625 and standardized loadings from .710 to .836 (Table 2). The overall alertness composite had alpha = .931, though its three facets were kept distinct in the factor analysis. The six-factor model fitted the observed covariance structure closely, $\chi^2(309) = 302.387$, CFI = 1.000, TLI = 1.001, RMSEA = .000, SRMR = .029. An RMSEA of zero and a TLI slightly above one are possible when the chi-square statistic is below the degrees of freedom; neither means that measurement is literally error-free.

Table 2 Reliability and average variance extracted

Factor	Alpha	AVE	Loading range
Intention	0.908	0.625	0.761–0.836
Scanning and search	0.908	0.625	0.745–0.836
Association and connection	0.826	0.613	0.741–0.814
Evaluation and judgment	0.852	0.592	0.710–0.836
Implementation planning	0.816	0.598	0.738–0.798
Anticipated failure appraisals	0.871	0.576	0.713–0.805

Note. AVE = average variance extracted. Alertness facets were modeled separately in the six-factor CFA. Reliability was not calculated for the seven-activity index because its items represent distinct completed activities.

The six-factor specification fitted better than each of the alternatives in Table 3. In particular, combining the alertness facets or combining intention with implementation planning reduced fit, while the single-factor model performed substantially worse. These comparisons support retaining the proposed measurement distinctions. They do not establish equivalence of item interpretation across programmes or rule out all sources of common-method influence.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

Table 3 Confirmatory measurement model comparisons

Model	χ^2	df	CFI	TLI	RMSEA	SRMR
Six correlated factors	302.387	309	1.000	1.001	0.000	0.029
Alertness facets combined	824.562	318	0.940	0.934	0.053	0.043
Intention and planning combined	755.258	314	0.948	0.942	0.050	0.062
Single factor	3794.349	324	0.592	0.558	0.138	0.130

Note. Normal-theory maximum likelihood. TLI is unbounded; RMSEA is lower-bounded at zero. All models converged. The single-factor model excludes the activity index.

Regression and conditional associations

The first two regression equations were consistent with H1 and H2. Entrepreneurial intention was positively associated with alertness (B = .426, 95% HC3 CI [.362, .490]), and alertness was positively related to implementation intentions after accounting for intention and fear (B = .382, 95% HC3 CI [.300, .464]). The equations explained 24.3% and 34.6% of the variation in alertness and planning, respectively. Table 4 reports the focal unstandardized coefficients; institutional indicators and intercepts were included in the models but are not shown.

Table 4A Alertness equation

Predictor	B	HC3 SE	95% CI	p
Intention	0.426	0.032	[0.362, 0.490]	< .001
Fear	-0.052	0.047	[-0.144, 0.041]	0.275

Note. N = 567; R^2 = .243. HC3 = heteroskedasticity-consistent standard error. Five institutional indicator variables were included in the fitted equation; they are omitted from the table. Continuous predictors were mean-centred for the conditional process specification.

Table 4B Planning equation

Predictor	B	HC3 SE	95% CI	p
Intention	0.266	0.037	[0.193, 0.338]	< .001
Alertness	0.382	0.042	[0.300, 0.464]	< .001
Fear	-0.114	0.043	[-0.199, -0.029]	0.009

Note. N = 567; R^2 = .346. HC3 = heteroskedasticity-consistent standard error. Five institutional indicator variables were included in the fitted equation; they are omitted from the table. Continuous predictors were mean-centred for the conditional process specification.

SOCIAL PRISM
Online ISSN: 3006-8886
Print ISSN: 3006-8878

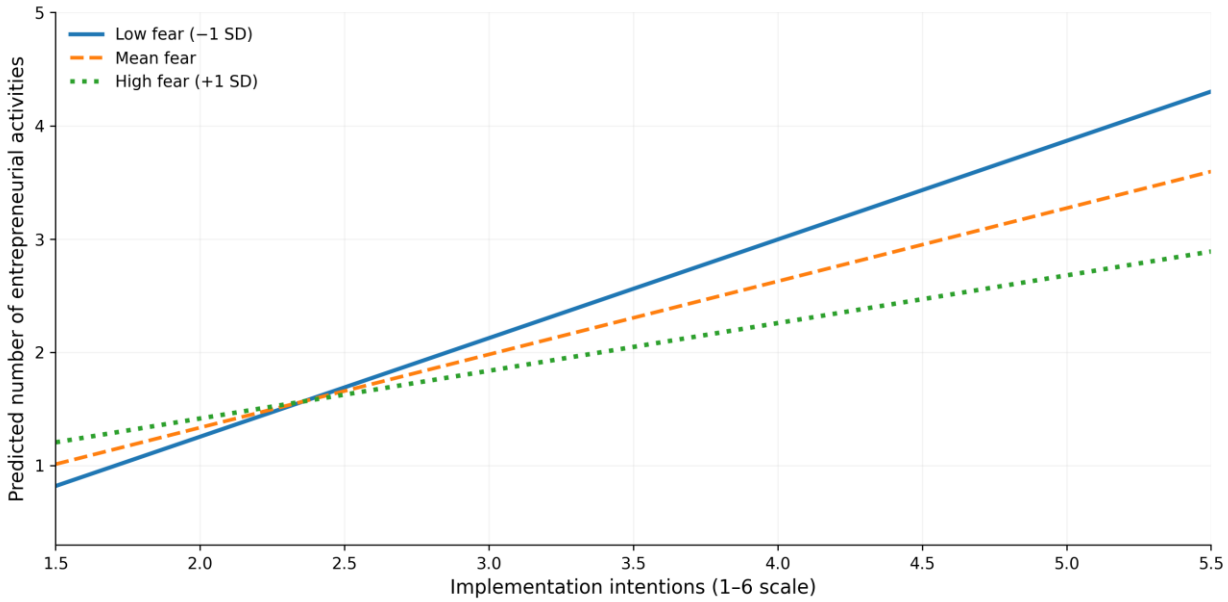
Table 4C Action equation

Predictor	B	HC3 SE	95% CI	p
Intention	0.250	0.052	[0.149, 0.352]	< .001
Alertness	0.246	0.059	[0.129, 0.362]	< .001
Planning	0.646	0.055	[0.537, 0.755]	< .001
Fear	-0.248	0.057	[-0.361, -0.135]	< .001
Planning × fear	-0.225	0.039	[-0.302, -0.148]	< .001

Note. N = 567; R^2 = .523. HC3 = heteroskedasticity-consistent standard error. Five institutional indicator variables were included in the fitted equation; they are omitted from the table. The coefficient for planning is the conditional slope at mean fear; the coefficient for fear is its association with action at mean planning.

At average fear of failure, implementation intentions were positively related to the activity count (B = .646, 95% HC3 CI [.537, .755]), consistent with H3. The planning × fear interaction was negative (B = −.225, 95% HC3 CI [−.302, −.148], p < .001), supporting H5. A one-unit difference in planning was thus associated with a smaller difference in reported activity among students with higher failure concerns. The interaction added ΔR^2 = .024 to the action equation (full R^2 = .523). Figure 2 illustrates the fitted relationships.

Figure 2 Predicted nascent entrepreneurial action by planning and fear of failure



Note. Predictions are calculated from the reported linear action equation for the reference institutional category, with entrepreneurial intention and alertness at their sample means. Fear is shown at the mean and one standard deviation below and above it (SD = .999); planning scores are displayed over a common illustrative interval within the 1–6 response scale. The lines describe model-implied cross-sectional associations and are not forecasts of individual activity.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

At low, average and high fear, the estimated planning–action slopes were .871, .646 and .421, respectively. The serial indirect products for those values were .142, .105 and .069, with bootstrap confidence intervals excluding zero (Table 5). The index of moderated serial mediation was −.037, 95% bootstrap CI [−.052, −.022], consistent with H6. The serial route therefore remained positive but became weaker as fear increased; it is one of several indirect routes represented in the fitted model.

Table 5 Conditional planning slopes and serial indirect associations

Fear level	Planning slope	95% HC3 CI	Serial product	95% bootstrap CI
Lower fear −1 SD	0.871	[0.737, 1.005]	0.142	[0.102, 0.185]
Mean fear	0.646	[0.537, 0.755]	0.105	[0.074, 0.140]
Higher fear +1 SD	0.421	[0.288, 0.554]	0.069	[0.042, 0.099]

Note. Fear SD = .999. Conditional serial product = $a_1 d_{21}(b_2 + qw)$, with w representing centred fear. The index of moderated serial mediation is $a_1 d_{21} q$ = −.037, 95% percentile bootstrap CI [−.052, −.022]. Confidence intervals are based on 5,000 resamples within institutional strata, with conditional fear values fixed at the sample mean and ±1 SD.

Discussion

What the conditional pattern explains

The planning–action association changed in magnitude across levels of fear, but it did not reverse. At the higher fear value examined, students with more definite plans still tended to report activities in more domains, although that difference was smaller than at lower fear. It would therefore be mistaken to conclude that apprehension makes planning useless. The finding instead concerns the distance between deciding upon a step and carrying it out. A student may know whom to contact or what to demonstrate without having approached the person who will judge the idea. The questionnaire records reported plans and completed activities, but not what happened at the point when a planned encounter was due.

The distinction is consequential for entrepreneurship education. Opportunity evaluation and implementation planning can make a proposed task clearer, but they do not resolve the possibility of receiving an unwelcome answer from a customer or discovering that a prototype is not useful. The observed interaction is consistent with this difficulty at the point of action. It does not establish that respondents consciously postponed a task because they feared its outcome. Following students from the specification of a next step to its attempted completion would provide a more direct test of that interpretation.

Alshahrani et al. (2026) examine entrepreneurial self-efficacy as a link between alertness and behavior. Our second link concerns implementation intentions, which address a different question. Believing that one has the ability to start a venture does not tell us whether the first potential customer has been identified or a meeting arranged. By the same token, a student may know exactly what to attempt and still be uneasy about rejection. Confidence and the specification of an action may therefore matter together rather than compete as explanations.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

Examining fear at the planning–action link brings a further issue into view: the perceived consequences of putting a prepared step into practice.

Competing explanations and the boundaries of fear

Fear is one possible explanation for the gap between a stated plan and completed activity, but it need not be the only one. A student with limited funds or no access to potential customers may anticipate failure partly because the practical conditions for a test are poor. The reverse sequence is also plausible: an unsuccessful first approach might make a student more cautious and lead to a revised plan. Because activities were recalled retrospectively and current appraisals were measured at the survey date, the present model cannot separate hesitation attributable to fear from these resource and feedback explanations.

The seven activities also differ in what they require from students. Reviewing competitors can be undertaken privately; showing a prototype or seeking capital requires another person's involvement. A stronger association with fear for the latter activities would be plausible, but the combined activity score cannot reveal it. Research retaining the individual activity indicators could examine whether publicly evaluated or financially demanding steps are more closely associated with failure appraisals than private exploratory work.

Nor is the anticipated cost of failure necessarily the same for a student considering a first idea and someone who has already tested one. The former may be concerned with a general possibility of embarrassment; the latter may have a particular customer or financial obligation in mind. Our five appraisal items do not track those changes through a venture's development. They describe the consequences respondents expected at the survey date. For that reason, the moderation finding should not be carried over uncritically to the experience of entrepreneurs already managing established businesses.

Relevance to students and universities in Lahore

The meaning of an activity count is especially important in a sample drawn from different academic programmes. Developing a functioning software prototype may absorb weeks of work in one domain, while a proposed trading venture might involve several short conversations with suppliers and customers. Both students may have undertaken serious preparatory work, although the seven-domain count says little about its depth or commercial value. For a university evaluating entrepreneurship education, the number of recorded tasks should therefore be considered alongside what the student tried to establish, what evidence emerged and what decision followed.

Implications for entrepreneurship education

The educational difficulty is not identical for every student who has yet to attempt a venture. Some may still be comparing several possibilities and need help deciding which one merits attention. Others may have specified a sensible first task but remain concerned about exposing the idea to an outside response. In the second case, support could centre on making an initial test small and manageable rather than requiring another lengthy plan. For instance, a supervised customer conversation or small product trial could be organised around a question the student

Online ISSN: 3006-8886
Print ISSN: 3006-8878

wishes to answer, with a decision about what to do if the response is unfavorable. These possibilities follow from our interpretation of the model; the survey did not evaluate a teaching intervention.

For the same reason, a business plan should not be the only evidence of achievement in an entrepreneurship course. A carefully written plan may still contain assumptions that nobody has checked. Conversely, discontinuing an idea after credible market feedback may reflect a sound decision rather than a lack of enterprise. An assessment of entrepreneurial learning would ask why a particular activity was chosen, what evidence it supplied and how the student used that evidence. The seven-domain count cannot make those distinctions, even when it records that a task was completed.

Nor should every decision to delay an entrepreneurial step be regarded as a problem requiring intervention. Approaching an investor before a proposal can withstand basic scrutiny may be unwise; borrowing more than a student can afford to lose may be worse. Our interaction estimate does not distinguish prudent restraint from fear that discourages a useful, low-cost experiment. A more defensible educational response is to help students judge the likely cost of a first test, obtain informed advice and consider alternatives. The objective should be thoughtful entrepreneurial action, not activity for its own sake.

Limitations and scope

The greatest limitation concerns when the measures were obtained. Intention, alertness, implementation plans and failure appraisals describe respondents at the survey date, while completed activities were recalled for the previous six months. An earlier customer encounter may have strengthened an intention or changed the plan now reported; a disappointing attempt may have altered the respondent's fear of failure. The order of variables in the regressions is therefore a theoretical specification, not an observed history of decisions. The serial estimates should be read as conditional associations, not as evidence that the proposed mediation unfolded causally.

The measurement results also require a bounded interpretation. The factor analysis distinguishes the intended questionnaire constructs in this sample, but we did not test whether the adapted items were understood equivalently across academic programmes or language groups. Moreover, alertness was represented by three correlated facets in the confirmatory model and by an overall item composite in the regressions. Its regression coefficient describes the latter scoring decision; it does not establish a higher-order latent factor. A subsequent study could test measurement invariance and examine whether scanning, association and evaluation contribute differently to the preparation of an actionable step.

The outcome was designed to capture the breadth of entrepreneurial effort rather than its duration or intensity. A brief market inquiry and prolonged product development each contribute one point to the seven-domain total. The bounds of that total also matter statistically: ordinary least squares gives coefficients in activity units but may produce fitted values outside zero to seven. Richer accounts of the individual activities, together with a bounded alternative such as the fractional-response approach discussed by Papke and Wooldridge (1996), would allow a closer examination of how much the findings depend on the outcome definition.

Online ISSN: 3006-8886
Print ISSN: 3006-8878

The sample does not support population estimates for university students across Lahore. The participating programmes were not selected from a probability sampling frame for that population, and the responses were not weighted to reflect its composition. Although institutional indicators account for mean differences between the sampled groups, they do not correct selection effects or address the possibility that classmates and project partners gave related responses. Replication with an explicit sampling frame and allowance for students grouped within courses or projects would strengthen the basis for generalising these associations.

Other circumstances may also account for why a student who can specify a next step has not yet attempted it. Business experience, family contacts, access to funds, perceived behavioral control and employment options may shape both the plan and the opportunity to act. Entrepreneurial self-efficacy, discussed by Alshahrani et al. (2026), may contribute alongside implementation planning rather than being replaced by it. A useful extension would distinguish resources that help students decide what to do from those that make the chosen step feasible. The current model does not separately identify these influences.

Conclusion

Research on student entrepreneurship has often asked whether students intend to establish a business. The present findings underline the additional value of asking what they have actually attempted. Stronger entrepreneurial intention was associated with greater alertness and more specific implementation plans, while clearer plans accompanied activity in more venture-related domains. That final association was weaker at higher fear of failure, although it remained positive. Fear therefore appears relevant to the uncertain work of putting an idea before others, not merely to choosing entrepreneurship as a career. Following students from a stated next step to its later completion would allow that interpretation to be examined over time.

References

1. Ahmed, I. (2022). Linking self-efficacy, entrepreneurial fit, family support, and entrepreneurial intentions: An explanatory mechanism. *Frontiers in Psychology*, *13*, Article 959444. https://doi.org/10.3389/fpsyg.2022.959444
2. Ahmed, I., Islam, T., & Usman, A. (2021). Predicting entrepreneurial intentions through self-efficacy, family support, and regret. *Journal of Entrepreneurship in Emerging Economies*, *13*(1), 26–38. https://doi.org/10.1108/jeee-07-2019-0093
3. Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/10.1016/0749-5978(91)90020-t
4. Ajzen, I. (2002). Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior. *Journal of Applied Social Psychology*, *32*(4), 665–683. https://doi.org/10.1111/j.1559-1816.2002.tb00236.x
5. Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, *2*(4), 314–324. https://doi.org/10.1002/hbe2.195
6. Alshahrani, M. A., Yaqub, M. Z., & Alsabban, A. (2026). Transforming entrepreneurial intentions to action: A serial mediation model of entrepreneurial alertness and entrepreneurial self-efficacy. *Journal of Research in Marketing and Entrepreneurship*. Advance online publication. https://doi.org/10.1108/jrme-05-2025-0093

7. Armitage, C. J., & Conner, M. (2001). Efficacy of the theory of planned behaviour: A meta-analytic review. *British Journal of Social Psychology*, *40*(4), 471–499. https://doi.org/10.1348/014466601164939
8. Bae, T. J., Qian, S., Miao, C., & Fiet, J. O. (2014). The relationship between entrepreneurship education and entrepreneurial intentions: A meta–analytic review. *Entrepreneurship Theory and Practice*, *38*(2), 217–254. https://doi.org/10.1111/etap.12095
9. Baron, R. A. (2006). Opportunity recognition as pattern recognition: How entrepreneurs "connect the dots" to identify new business opportunities. *Academy of Management Perspectives*, *20*(1), 104–119. https://doi.org/10.5465/amp.2006.19873412
10. Bird, B. (1988). Implementing entrepreneurial ideas: The case for intention. *The Academy of Management Review*, *13*(3), 442–453. https://doi.org/10.2307/258091
11. Cacciotti, G., & Hayton, J. C. (2015). Fear and entrepreneurship: A review and research agenda. *International Journal of Management Reviews*, *17*(2), 165–190. https://doi.org/10.1111/ijmr.12052
12. Cacciotti, G., Hayton, J. C., Mitchell, J. R., & Allen, D. G. (2020). Entrepreneurial fear of failure: Scale development and validation. *Journal of Business Venturing*, *35*(5), Article 106041. https://doi.org/10.1016/j.jbusvent.2020.106041
13. Cacciotti, G., Hayton, J. C., Mitchell, J. R., & Giazitzoglu, A. (2016). A reconceptualization of fear of failure in entrepreneurship. *Journal of Business Venturing*, *31*(3), 302–325. https://doi.org/10.1016/j.jbusvent.2016.02.002
14. Cameron, A. C., & Miller, D. L. (2015). A practitioner's guide to cluster-robust inference. *Journal of Human Resources*, *50*(2), 317–372. https://doi.org/10.3368/jhr.50.2.317
15. Conroy, D. E., Willow, J. P., & Metzler, J. N. (2002). Multidimensional fear of failure measurement: The Performance Failure Appraisal Inventory. *Journal of Applied Sport Psychology*, *14*(2), 76–90. https://doi.org/10.1080/10413200252907752
16. Conway, J. M., & Lance, C. E. (2010). What reviewers should expect from authors regarding common method bias in organizational research. *Journal of Business and Psychology*, *25*(3), 325–334. https://doi.org/10.1007/s10869-010-9181-6
17. Dunn, T. J., Baguley, T., & Brunsden, V. (2014). From alpha to omega: A practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology*, *105*(3), 399–412. https://doi.org/10.1111/bjop.12046
18. Edelman, L. F., Manolova, T., Shirokova, G., & Tsukanova, T. (2016). The impact of family support on young entrepreneurs' start-up activities. *Journal of Business Venturing*, *31*(4), 428–448. https://doi.org/10.1016/j.jbusvent.2016.04.003
19. Elliot, A. J., & Church, M. A. (1997). A hierarchical model of approach and avoidance achievement motivation. *Journal of Personality and Social Psychology*, *72*(1), 218–232. https://doi.org/10.1037/0022-3514.72.1.218
20. Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, *67*(5), 663–666. https://doi.org/10.1016/j.jbusres.2013.11.024
21. Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, *18*(1), 39–50. https://doi.org/10.1177/002224378101800104

22. Frese, M., & Gielnik, M. M. (2014). The psychology of entrepreneurship. *Annual Review of Organizational Psychology and Organizational Behavior*, *1*(1), 413–438. https://doi.org/10.1146/annurev-orgpsych-031413-091326
23. Gielnik, M. M., Frese, M., Kahara-Kawuki, A., Wasswa Katono, I., Kyejjusa, S., Ngoma, M., Munene, J., Namatovu-Dawa, R., Nansubuga, F., Orobia, L., Oyugi, J., Sejjaaka, S., Sserwanga, A., Walter, T., Bischoff, K. M., & Dlugosch, T. J. (2015). Action and action-regulation in entrepreneurship: Evaluating a student training for promoting entrepreneurship. *Academy of Management Learning & Education*, *14*(1), 69–94. https://doi.org/10.5465/amle.2012.0107
24. Gielnik, M. M., Krämer, A.-C., Kappel, B., & Frese, M. (2014). Antecedents of business opportunity identification and innovation: Investigating the interplay of information processing and information acquisition. *Applied Psychology*, *63*(2), 344–381. https://doi.org/10.1111/j.1464-0597.2012.00528.x
25. Gieure, C., Benavides-Espinosa, M. D. M., & Roig-Dobón, S. (2020). The entrepreneurial process: The link between intentions and behavior. *Journal of Business Research*, *112*, 541–548. https://doi.org/10.1016/j.jbusres.2019.11.088
26. Gollwitzer, P. M. (1999). Implementation intentions: Strong effects of simple plans. *American Psychologist*, *54*(7), 493–503. https://doi.org/10.1037/0003-066x.54.7.493
27. Gollwitzer, P. M., & Sheeran, P. (2006). Implementation intentions and goal achievement: A meta-analysis of effects and processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 38, pp. 69–119). Academic Press. https://doi.org/10.1016/s0065-2601(06)38002-1
28. Hayes, A. F. (2015). An index and test of linear moderated mediation. *Multivariate Behavioral Research*, *50*(1), 1–22. https://doi.org/10.1080/00273171.2014.962683
29. Heckhausen, H., & Gollwitzer, P. M. (1987). Thought contents and cognitive functioning in motivational versus volitional states of mind. *Motivation and Emotion*, *11*(2), 101–120. https://doi.org/10.1007/bf00992338
30. Hu, L.-T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling: A Multidisciplinary Journal*, *6*(1), 1–55. https://doi.org/10.1080/10705519909540118
31. Kautonen, T., van Gelderen, M., & Fink, M. (2015). Robustness of the theory of planned behavior in predicting entrepreneurial intentions and actions. *Entrepreneurship Theory and Practice*, *39*(3), 655–674. https://doi.org/10.1111/etap.12056
32. Kirzner, I. M. (1997). Entrepreneurial discovery and the competitive market process: An Austrian approach. *Journal of Economic Literature*, *35*(1), 60–85. https://www.jstor.org/stable/2729693
33. Krueger, N. F., Reilly, M. D., & Carsrud, A. L. (2000). Competing models of entrepreneurial intentions. *Journal of Business Venturing*, *15*(5–6), 411–432. https://doi.org/10.1016/s0883-9026(98)00033-0
34. Lakens, D. (2022). Sample size justification. *Collabra: Psychology*, *8*(1), Article 33267. https://doi.org/10.1525/collabra.33267
35. Liñán, F., & Chen, Y.-W. (2009). Development and cross–cultural application of a specific instrument to measure entrepreneurial intentions. *Entrepreneurship Theory and Practice*, *33*(3), 593–617. https://doi.org/10.1111/j.1540-6520.2009.00318.x
36. Liñán, F., & Fayolle, A. (2015). A systematic literature review on entrepreneurial intentions: Citation, thematic analyses, and research agenda. *International*

Entrepreneurship and Management Journal, *11*(4), 907–933. https://doi.org/10.1007/s11365-015-0356-5

37. Long, J. S., & Ervin, L. H. (2000). Using heteroscedasticity consistent standard errors in the linear regression model. *The American Statistician*, *54*(3), 217–224. https://doi.org/10.1080/00031305.2000.10474549
38. Maxwell, S. E., & Cole, D. A. (2007). Bias in cross-sectional analyses of longitudinal mediation. *Psychological Methods*, *12*(1), 23–44. https://doi.org/10.1037/1082-989x.12.1.23
39. McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial action and the role of uncertainty in the theory of the entrepreneur. *Academy of Management Review*, *31*(1), 132–152. https://doi.org/10.5465/amr.2006.19379628
40. Meoli, A., Fini, R., Sobrero, M., & Wiklund, J. (2020). How entrepreneurial intentions influence entrepreneurial career choices: The moderating influence of social context. *Journal of Business Venturing*, *35*(3), Article 105982. https://doi.org/10.1016/j.jbusvent.2019.105982
41. Morgan, J., & Sisak, D. (2016). Aspiring to succeed: A model of entrepreneurship and fear of failure. *Journal of Business Venturing*, *31*(1), 1–21. https://doi.org/10.1016/j.jbusvent.2015.09.002
42. Nabi, G., Liñán, F., Fayolle, A., Krueger, N., & Walmsley, A. (2017). The impact of entrepreneurship education in higher education: A systematic review and research agenda. *Academy of Management Learning & Education*, *16*(2), 277–299. https://doi.org/10.5465/amle.2015.0026
43. Neneh, B. N. (2019). From entrepreneurial alertness to entrepreneurial behavior: The role of trait competitiveness and proactive personality. *Personality and Individual Differences*, *138*, 273–279. https://doi.org/10.1016/j.paid.2018.10.020
44. Nowiński, W., Haddoud, M. Y., Lančarič, D., Egerová, D., & Czeglédi, C. (2019). The impact of entrepreneurship education, entrepreneurial self-efficacy and gender on entrepreneurial intentions of university students in the Visegrad countries. *Studies in Higher Education*, *44*(2), 361–379. https://doi.org/10.1080/03075079.2017.1365359
45. Papke, L. E., & Wooldridge, J. M. (1996). Econometric methods for fractional response variables with an application to 401(k) plan participation rates. *Journal of Applied Econometrics*, *11*(6), 619–632. https://doi.org/10.1002/(SICI)1099-1255(199611)11:6<619::AID-JAE418>3.0.CO;2-1
46. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. https://doi.org/10.1037/0021-9010.88.5.879
47. Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Addressing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, *42*(1), 185–227. https://doi.org/10.1080/00273170701341316
48. Rauch, A., & Hulsink, W. (2015). Putting entrepreneurship education where the intention to act lies: An investigation into the impact of entrepreneurship education on entrepreneurial behavior. *Academy of Management Learning & Education*, *14*(2), 187–204. https://doi.org/10.5465/amle.2012.0293
49. Saeed, S., Yousafzai, S. Y., Yani-De-Soriano, M., & Muffatto, M. (2015). The role of perceived university support in the formation of students' entrepreneurial intention.

Journal of Small Business Management, *53*(4), 1127–1145. https://doi.org/10.1111/jsbm.12090

50. Sajjad, A., & Talat, A. (2024). *Fear of failure and entrepreneurship in Pakistan: Role of family support in promoting entrepreneurial intention of youth* (Working Paper No. 02-2024). Lahore School of Economics. https://itc.lahoreschool.edu.pk/assets/uploads/working_papers/Working%20Paper%2002-2024%20Amber%20Sajjad%20%26%20Amina%20Talat.pdf
51. Schlaegel, C., & Koenig, M. (2014). Determinants of entrepreneurial intent: A meta–analytic test and integration of competing models. *Entrepreneurship Theory and Practice*, *38*(2), 291–332. https://doi.org/10.1111/etap.12087
52. Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, *25*(1), 217–226. https://doi.org/10.5465/amr.2000.2791611
53. Sheeran, P. (2002). Intention—behavior relations: A conceptual and empirical review. *European Review of Social Psychology*, *12*(1), 1–36. https://doi.org/10.1080/14792772143000003
54. Sheeran, P., & Webb, T. L. (2016). The intention–behavior gap. *Social and Personality Psychology Compass*, *10*(9), 503–518. https://doi.org/10.1111/spc3.12265
55. Shirokova, G., Osiyevskyy, O., & Bogatyreva, K. (2016). Exploring the intention–behavior link in student entrepreneurship: Moderating effects of individual and environmental characteristics. *European Management Journal*, *34*(4), 386–399. https://doi.org/10.1016/j.emj.2015.12.007
56. Souitaris, V., Zerbinati, S., & Al-Laham, A. (2007). Do entrepreneurship programmes raise entrepreneurial intention of science and engineering students? The effect of learning, inspiration and resources. *Journal of Business Venturing*, *22*(4), 566–591. https://doi.org/10.1016/j.jbusvent.2006.05.002
57. Tang, J., Kacmar, K. M., & Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing*, *27*(1), 77–94. https://doi.org/10.1016/j.jbusvent.2010.07.001
58. van Gelderen, M., Kautonen, T., & Fink, M. (2015). From entrepreneurial intentions to actions: Self-control and action-related doubt, fear, and aversion. *Journal of Business Venturing*, *30*(5), 655–673. https://doi.org/10.1016/j.jbusvent.2015.01.003
59. van Gelderen, M., Kautonen, T., Wincent, J., & Biniari, M. (2018). Implementation intentions in the entrepreneurial process: Concept, empirical findings, and research agenda. *Small Business Economics*, *51*(4), 923–941. https://doi.org/10.1007/s11187-017-9971-6
60. Webb, T. L., & Sheeran, P. (2006). Does changing behavioral intentions engender behavior change? A meta-analysis of the experimental evidence. *Psychological Bulletin*, *132*(2), 249–268. https://doi.org/10.1037/0033-2909.132.2.249