

HUMAN RESOURCE DEVELOPMENT PRACTICES AND SECONDARY SCHOOL TEACHER PERFORMANCE IN DISTRICT JHAL MAGSI, BALOCHISTAN: A SURVEY OF TEACHERS' PERCEPTIONS

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DOI: <http://doi.org/10.5281/zenodo.23234765>

Keywords

human resource development, teacher performance, lesson planning, classroom management, technology integration, professional growth, Balochistan

Article History

Received: 07 January 2026

Accepted: 20 February 2026

Published: 06 March 2026

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Abstract

Human resource development (HRD) is widely promoted as a route to better teaching, yet evidence from remote districts of Balochistan is scarce. This study examined how secondary school teachers in District Jhal Magsi perceive HRD practices (in-service training, coaching, mentoring, and performance appraisal) and how these perceptions relate to self-reported performance. A cross-sectional survey was conducted as a census of all 176 teachers in 63 government secondary schools, using a 25-item, five-point Likert questionnaire reviewed by five experts and piloted with 20 teachers (pilot Cronbach's $\alpha = .78-.85$). Descriptive statistics, multiple regression controlling for gender, age, experience, and school type, and one-way ANOVA were computed in SPSS. Between 68.8% and 77.3% of teachers agreed with each HRD perception item, and agreement was lower for technology integration items (43.2–59.1%) than for lesson planning (57.4–71.6%) and classroom management (61.9–73.3%) items. The HRD composite was positively associated with overall job performance ($\beta = .52$), classroom management ($\beta = .50$), lesson planning and delivery ($\beta = .47$), and, more weakly, technology integration ($\beta = .25$); all $p \leq .002$, and none of the demographic controls was significant. Perceived implementation challenges were rated below the scale midpoint ($M = 2.54$), with 26.1–34.7% agreeing with individual challenge items, most often limited administrative support and lack of follow-up. HRD perceptions differed by teaching experience, $F(4, 171) = 4.23$, $p = .003$, but not by gender or school type. Because the design is cross-sectional and self-reported, the associations are not causal; sustained, practice-linked programmes with follow-up support are recommended.

INTRODUCTION

Teacher quality is among the strongest school-level influences on student learning, which is why international frameworks treat continuing professional development as a pillar of education system strengthening (UNESCO, 2015). The World Bank's (2018) account of a global "learning crisis" makes the same point: schooling without learning is a waste of

children's time, and teachers need support to meet students at their actual level. Human resource development (HRD) in education, understood here as organised efforts such as in-service training, coaching, mentoring, and performance appraisal that build teachers' knowledge, skills, and attitudes, is the main vehicle for that support.

Evidence on what makes such efforts work is fairly consistent. Effective professional development is content-focused, active, collaborative, sustained, and supported by coaching and feedback (Darling-Hammond et al., 2017; Desimone, 2009). One-off workshops with little follow-up rarely change practice (Joyce & Showers, 2002). Much of this evidence, however, comes from well-resourced systems, and little is known about how teachers in remote, low-literacy districts experience HRD. District Jhal Magsi in Balochistan is such a setting: most residents live in rural areas, and the 2017 census recorded a literacy ratio of 23.5% for people aged 10 and above (14.6% for females; Pakistan Bureau of Statistics, 2017). To our knowledge, no quantitative study has documented how teachers there perceive HRD or how these perceptions relate to their classroom practice.

This study addresses that gap by describing secondary school teachers' perceptions of HRD practices in District Jhal Magsi and testing how these perceptions relate to self-reported performance in lesson planning and delivery, technology integration, and classroom management.

Research Objectives

The study pursued the following objectives:

- 1: To assess the perceived overall effects of HRD practices on the performance of secondary school teachers in District Jhal Magsi.
- 2: To examine the effects of HRD practices on teachers' self-reported lesson planning and delivery.
- 3: To analyse the effects of HRD practices on teachers' self-reported integration of technology into classroom instruction.
- 4: To investigate the effects of HRD practices on teachers' self-reported classroom management skills.
- 5: To identify the key challenges hindering the implementation of HRD practices in government secondary schools in District Jhal Magsi.

Research Hypotheses

Because the design is correlational, "effects" in the objectives refers to associations in teachers'

perceptions. The following alternative hypotheses were tested:

H1. There is a significant association between HRD practices and teachers' perceived overall job performance.

H2. There is a significant association between HRD practices and teachers' self-reported lesson planning and delivery.

H3. There is a significant association between HRD practices and teachers' self-reported integration of technology into instruction.

H4. There is a significant association between HRD practices and teachers' self-reported classroom management skills.

Three further comparisons of HRD perceptions by teaching experience (H5), gender (H6), and school type (H7) were also examined.

Literature Review

Professional Learning and Teacher Practice

Reviews of the professional development literature converge on a short list of design features: a focus on subject content, active learning, collaboration, models of effective practice, coaching, feedback and reflection, and sufficient duration (Darling-Hammond et al., 2017). Desimone (2009) reduces these to five core features (content focus, active learning, coherence, duration, and collective participation) and argues that they, rather than the activity format, drive changes in knowledge and practice. System-level policy needs to support these features, since professional learning that is disconnected from school priorities seldom accumulates into change (Darling-Hammond & McLaughlin, 2011).

Coaching, Mentoring, and Learning Communities

Transfer from training to classrooms depends on follow-up. Peer coaching was a central element in the staff-development model of Joyce and Showers (2002), and a meta-analysis of causal studies found that teacher coaching produces meaningful improvements in instruction and smaller improvements in student achievement (Kraft et al., 2018). Professional learning communities (PLCs) show a similar pattern: a review of empirical studies found that they generally changed teaching practice and

supported student learning (Vescio et al., 2008). These findings suggest that perceived benefits of HRD should be strongest where coaching, mentoring, and collaboration are present.

Technology Integration

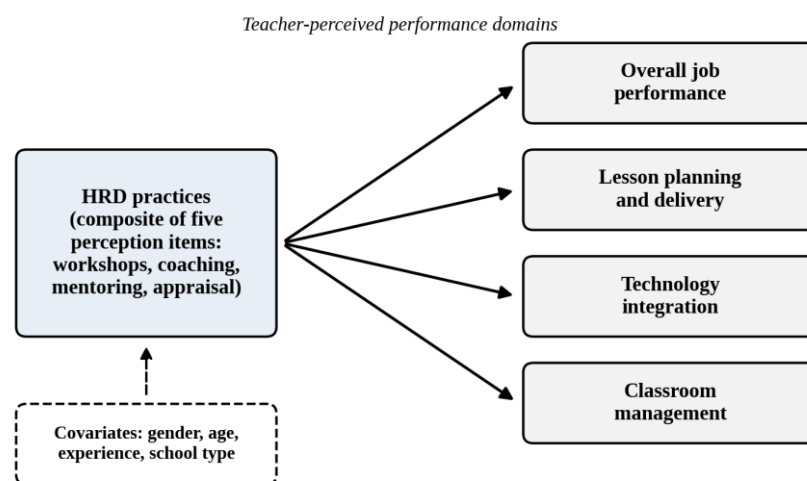
Technology training often raises technical confidence without changing pedagogy. Ertmer (1999) distinguished first-order barriers (access, time, and support) from second-order barriers (teachers' beliefs and established practices), and later work showed that knowledge, self-efficacy, pedagogical beliefs, and school culture jointly shape technology change (Ertmer & Ottenbreit-Leftwich, 2010). Technology integration may

therefore respond less to HRD than planning or classroom management does, especially where infrastructure is limited.

Research Gap and Conceptual Framework

Taken together, this literature suggests that HRD should be associated with better lesson planning and classroom management, and less strongly with technology integration, but it offers little district-level evidence from rural Balochistan or from teachers' own perspectives. The conceptual framework (Figure 1) proposes that HRD practices are associated with teachers' perceived performance in four domains, with demographic characteristics as covariates.

Figure 1 *Conceptual Framework of the Study*



Note. The HRD composite is the mean of five items on perceived benefits of in-service workshops, coaching, mentoring, and appraisal. Arrows show associations tested, not causal paths.

Method

Research Design

The study used a quantitative, cross-sectional descriptive survey design (Creswell & Creswell, 2018). The design documents teachers' perceptions at one point in time and tests associations among variables; it cannot establish that HRD causes changes in performance.

Population and Sampling

The population comprised all teachers in government secondary schools in District Jhal Magsi: 176 teachers (105 male and 71 female) in 63 schools (29 girls' and 34 boys' schools, including middle sections), according to the Balochistan Education Management Information System (2024). Eligible teachers

had at least one year of service and had taken part in at least one HRD activity in the two preceding academic years. Because the population was small and fully identifiable, a census was used, which removes sampling error and ensures representation of all schools, subjects, and both sexes (Taherdoost, 2016). Questionnaires were distributed to all eligible teachers, and the analysed dataset comprised 176 responses (Table 1).

Instrument

Data were collected with a structured, pre-coded questionnaire (DeVellis, 2017). Part A recorded five demographic items. Part B contained five items on perceptions of HRD practices, and Parts C to F contained five items each on lesson

planning and delivery, technology integration, classroom management skills, and challenges in implementing HRD, rated from 1 (*strongly disagree*) to 5 (*strongly agree*). Items were developed from the literature and the conceptual framework. An initial pool of 30 items was reviewed by five experts using an item-level content validity index (retention threshold .78) and tested in a pilot, then reduced to the final 25 items. The HRD composite is the mean of the five Part B items, so it measures perceived HRD benefit rather than the amount of training received; each outcome composite is the mean of its five items. Challenge items are worded as difficulties, so higher scores indicate greater perceived challenge.

Pilot and reliability

The pilot involved 20 teachers from nearby districts with similar characteristics, and wording was revised after expert and pilot feedback. Pilot Cronbach's α values were .82 (HRD perceptions), .85 (lesson planning and delivery), .80 (technology integration), .83 (classroom management), and .78 (challenges), all above the .70 threshold (Nunnally & Bernstein, 1994).

Procedure and Ethical Considerations

The Institutional Ethics Review Board of Alhamd Islamic University and the District

Education Authority, Jhal Magsi, approved the study. Teachers were told the purpose of the study and that participation was voluntary and withdrawal possible at any time, and informed consent was obtained. Questionnaires were delivered in person and collected over four weeks, with repeated visits to each school. Responses were anonymous, forms were stored securely, and only aggregate results are reported.

Data Analysis

Data were analysed in SPSS version 26. Frequencies, percentages, means, and standard deviations described the sample and items. Four multiple regressions tested H1 to H4, with the HRD composite as the predictor of each outcome composite and gender (male = 1), age, years of experience, and school type (girls' = 1) as covariates. One-way ANOVAs compared the HRD composite across experience bands, gender, and school type (H5 to H7). The significance level was .05, and effect sizes were interpreted against Cohen (1988).

Results

Participant Characteristics

Table 1 summarises the 176 respondents. Most were male (58.5%), 59.0% were aged 31–50, and 30.7% had 11–15 years of experience; 59.7% taught in girls' schools. Languages (27.8%) and sciences (25.0%) were the most common subjects.

Table 1 *Demographic Characteristics of Respondents (N = 176)*

Characteristic	Category	n	%
Gender	Male	103	58.5
	Female	71	40.3
	Prefer not to say	2	1.1
Age (years)	21–30	33	18.8
	31–40	55	31.2
	41–50	49	27.8
	51–60	28	15.9
	61 and above	11	6.2
Teaching experience	1–5 years	24	13.6
	6–10 years	44	25.0
	11–15 years	54	30.7
	16–20 years	34	19.3

Characteristic	Category	n	%
School type	21 years or more	20	11.4
	Girls' school	105	59.7
	Boys' school	71	40.3
Subject taught	Sciences	44	25.0
	Humanities	39	22.2
	Languages	49	27.8
	Mathematics	34	19.3
	Others	10	5.7

Note. Percentages are of the total sample.

Perceptions of HRD Practices and Lesson Planning

Perceptions of HRD were broadly favourable (Table 2, Figure 2). Agreement ranged from 68.8% (increased confidence) to 77.3% (improved overall teaching), and 74.4%

reported applying what they learned. For lesson planning and delivery, agreement was highest for setting clear learning objectives (71.6%) and lowest for formative assessment (57.4%) and differentiated instruction (60.2%), where 17.0% disagreed and over one fifth were neutral.

Table 2 Response Distributions for HRD Perceptions and Lesson Planning and Delivery Items

Item	Response category (%)					A + SA
	1	2	3	4	5	
Perceptions of HRD practices						
1. HRD improved my overall teaching performance.	4.5	6.8	11.4	44.3	33.0	77.3
2. I apply knowledge and skills gained from HRD programmes.	2.8	8.5	14.2	50.0	24.4	74.4
3. HRD contributes to my professional growth.	3.4	5.7	17.0	47.2	26.7	73.9
4. HRD interventions increased my teaching confidence.	4.0	7.4	19.9	48.9	19.9	68.8
5. HRD helps me stay updated with educational trends.	2.3	8.0	15.9	51.1	22.7	73.9
Lesson planning and delivery						
1. Workshops helped me set clear learning objectives.	3.4	8.0	17.0	44.3	27.3	71.6
2. I sequence instructional activities to build understanding.	4.0	10.2	19.9	43.2	22.7	65.9
3. I use differentiated instruction strategies.	5.7	11.4	22.7	38.6	21.6	60.2
4. I incorporate formative assessment techniques.	4.5	12.5	25.6	35.8	21.6	57.4
5. Coaching and mentoring increased my confidence in lesson delivery.	5.1	9.1	21.6	42.6	21.6	64.2

Note. N = 176. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree; A + SA = combined agree and strongly agree. Item labels are abbreviated from the questionnaire; percentages were calculated from the reported frequencies and may not sum to 100.0 because of rounding.

Technology Integration and Classroom Management

Technology items drew the weakest agreement (Table 3). Although 59.1% reported improved ability to operate educational software and hardware and 58.5% regular multimedia use, only 43.2% used a learning management system (28.4% disagreed) and half (50.0%) found

technology training adequate. Classroom management items were more favourable: 73.3% established clear rules and routines, 68.2% used positive behaviour reinforcement, and 61.9% to 66.7% endorsed restorative practices, PLCs, and mentoring for diverse classes.

Table 3 Response Distributions for Technology Integration and Classroom Management Items

Item	Response category (%)					A + SA
	1	2	3	4	5	
Technology integration						
1. ICT workshops improved my ability to operate educational software and hardware.	6.8	11.4	22.7	38.6	20.5	59.1
2. I regularly use multimedia to enhance lesson engagement.	5.7	10.2	25.6	39.8	18.8	58.5
3. I use a learning management system for assignments and feedback.	11.4	17.0	28.4	27.3	15.9	43.2
4. Professional development for technology integration is adequate.	8.5	14.2	27.3	33.0	17.0	50.0
5. Technology use enhances student participation.	8.0	14.8	23.9	37.5	15.9	53.4
Classroom management skills						
1. I established clear rules and routines after HRD training.	2.8	6.8	17.0	50.0	23.3	73.3
2. I use positive behaviour reinforcement strategies taught in workshops.	3.4	8.5	19.9	45.5	22.7	68.2
3. I implement restorative practices.	5.1	10.2	22.7	42.0	19.9	61.9
4. Professional learning communities help refine my management strategies. ^a	4.0	7.9	21.5	44.6	22.0	66.7
5. Mentoring and appraisal improved my ability to manage diverse classes.	4.5	9.1	20.5	43.2	22.7	65.9

Note. N = 176. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree; A + SA = combined agree and strongly agree. Item labels are abbreviated from the questionnaire; percentages were calculated from the reported frequencies and may not sum to 100.0 because of rounding. ^a Reported frequencies for this item sum to 177; percentages are based on 177.

Challenges in Implementing HRD

Most teachers did not endorse the listed challenges (Table 4). Agreement was highest for limited administrative support (34.7%) and lack of follow-up after training (33.0%), followed by

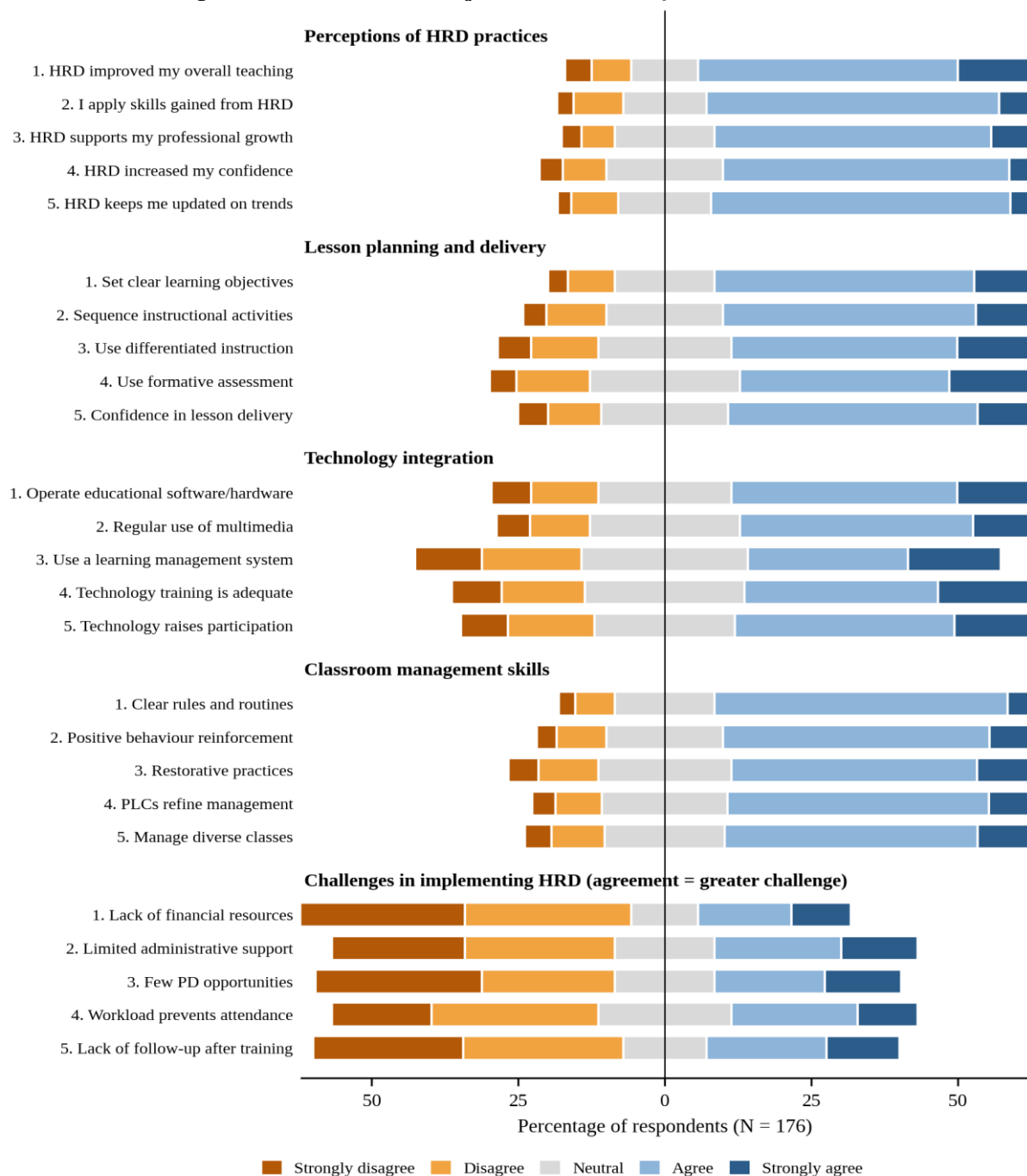
few professional development opportunities and workload (31.8% each) and financial constraints (26.1%). Disagreement exceeded agreement on every item, ranging from 45.5% (workload) to 62.5% (finance).

Table 4 *Response Distributions for Challenges in Implementing HRD Practices*

Item	Response category (%)					A + SA
	1	2	3	4	5	
Challenges in implementing HRD practices						
1. Lack of financial resources restricts access to quality HRD programmes.	34.1	28.4	11.4	15.9	10.2	26.1
2. Administrative support for HRD participation is limited.	22.7	25.6	17.0	21.6	13.1	34.7
3. There are few professional development opportunities in the district.	28.4	22.7	17.0	18.8	13.1	31.8
4. Workload prevents me from attending HRD trainings.	17.0	28.4	22.7	21.6	10.2	31.8
5. There is a lack of proper follow-up after HRD training.	25.6	27.3	14.2	20.5	12.5	33.0

Note. N = 176. 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree; A + SA = combined agree and strongly agree. Item labels are abbreviated from the questionnaire; percentages were calculated from the reported frequencies and may not sum to 100.0 because of rounding. For these items, agreement indicates greater perceived challenge.



Figure 2 *Distribution of Responses Across All Questionnaire Items*

Note. Bars are centred on the neutral category; percentages to the left of centre are disagreement and to the right are agreement. For the challenge items, agreement indicates greater challenge.

Composite Scores and Hypothesis Tests (H1-H4)

Composite means were highest for HRD perceptions ($M = 3.92$, $SD = 0.74$) and classroom management ($M = 3.85$, $SD = 0.78$), followed by

lesson planning and delivery ($M = 3.74$, $SD = 0.81$) and technology integration ($M = 3.32$, $SD = 0.85$); perceived challenges were below the scale midpoint ($M = 2.54$, $SD = 0.82$; Table 5).

Table 5 *Descriptive Statistics and Pilot Reliability of Composite Scales*

Composite	Items	Pilot α	M	SD	Range
HRD perceptions	5	.82	3.92	0.74	1.0–5.0
Lesson planning and delivery	5	.85	3.74	0.81	1.0–5.0
Technology integration	5	.80	3.32	0.85	1.0–5.0
Classroom management skills	5	.83	3.85	0.78	1.0–5.0
Challenges in HRD practices	5	.78	2.54	0.82	1.0–5.0

Note. $N = 176$. Composite scores are means of five items (range 1–5). α values are from the pilot sample ($n = 20$).

The HRD composite was positively and significantly associated with all four outcomes after controlling for gender, age, experience, and school type (Table 6), so H1 to H4 were supported. Associations were large for overall job performance ($\beta = .52$), classroom

management ($\beta = .50$), and lesson planning and delivery ($\beta = .47$), and small for technology integration ($\beta = .25$, $f^2 = 0.15$). None of the covariates was significant in any model (all $p \geq .185$).

Table 6 *Multiple Regression of Performance Domains on the HRD Composite*

Outcome	B	SE B	95% CI	β	t	p	R^2	f^2
Overall job performance	0.64	0.07	[0.50, 0.78]	.52	9.14	< .001	.42	0.72
Lesson planning and delivery	0.56	0.08	[0.40, 0.72]	.47	7.00	< .001	.35	0.54
Technology integration	0.28	0.09	[0.10, 0.46]	.25	3.11	.002	.13	0.15
Classroom management skills	0.61	0.07	[0.47, 0.75]	.50	8.71	< .001	.40	0.67

Note. $N = 176$; $df = 170$. Each model also included gender (male = 1), age, years of experience, and school type (girls' = 1), none of which was significant. Adjusted $R^2 = .40, .33, .10$, and $.38$, respectively. Confidence intervals were computed from B and SE B; the adjusted R^2 for overall job performance was computed from R^2 .

Group Differences in HRD Perceptions (H5–H7)

HRD perceptions differed significantly by teaching experience, $F(4, 171) = 4.23$, $p = .003$, $\eta^2 = .09$ (Table 7). Teachers with 11–15 years of

experience reported the highest HRD scores ($M = 4.02$) and those with 1–5 years the lowest ($M = 3.75$). No significant differences appeared by gender ($p = .145$) or school type ($p = .328$), so H5 was supported and H6 and H7 were not.

Table 7 *One-Way ANOVA of HRD Perceptions by Demographic Characteristics*

Variable	Group	n	M	SD	F	p	η^2
Teaching experience	1–5 years	24	3.75	0.71	4.23	.003	.09
	6–10 years	44	3.81	0.68			
	11–15 years	54	4.02	0.72			
	16–20 years	34	3.98	0.74			
	21+ years	20	3.92	0.70			
Gender	Male	103	3.88	0.73	2.14	.145	.01
	Female	71	4.02	0.69			

<i>Variable</i>	<i>Group</i>	<i>n</i>	<i>M</i>	<i>SD</i>	<i>F</i>	<i>p</i>	η^2
School type	Girls' school	105	3.95	0.71	0.96	.328	.01
	Boys' school	71	3.87	0.78			

Note. Two respondents who preferred not to state their gender are excluded from the gender comparison.

Discussion

Principal Findings

Teachers in District Jhal Magsi perceived HRD practices favourably and linked them most strongly to classroom management and lesson planning and most weakly to technology integration. The HRD composite was significantly associated with every performance domain after controlling for demographics, and perceived implementation challenges were rated below the midpoint, although about a third of teachers reported limited administrative support and weak follow-up after training. Perceptions varied with experience but not with gender or school type.

Interpretation in the Light of Previous Research

The strong links with lesson planning and classroom management fit evidence that content-focused, practice-linked professional learning changes instruction (Darling-Hammond et al., 2017; Desimone, 2009), and the favourable ratings of coaching, mentoring, and PLCs are consistent with research on those formats (Kraft et al., 2018; Vescio et al., 2008). The weaker technology results illustrate the gap between technical confidence and pedagogical integration: most teachers reported improved operation of software and hardware, but fewer used a learning management system or found technology training adequate, consistent with second-order barriers rooted in beliefs, support, and access (Ertmer, 1999; Ertmer & Ottenbreit-Leftwich, 2010). The lowest HRD scores among early-career teachers and the highest among mid-career teachers suggest that support is not reaching novices equally; mid-career teachers could serve as mentors.

Implications for Policy and Practice

1. **Sustain and focus HRD.** Prefer longer, content-based, classroom-linked programmes

with structured follow-up coaching over one-off workshops.

2. **Integrate technical and pedagogical technology training**, backed by infrastructure, modelling, and time to experiment.

3. **Strengthen mentoring and PLCs**, using experienced mid-career teachers as mentors and giving early-career teachers extra support.

4. **Address implementation barriers:** administrative support for participation, workload during training periods, and systematic post-training follow-up.

Limitations

The design is cross-sectional and based on self-reports, so the associations are not causal and may be inflated by shared-method variance and social desirability. The predictor measures perceived HRD benefit, not the amount or type of training received, and one of its items overlaps conceptually with perceived overall performance, so the H1 association may be partly definitional. Eligibility required prior participation in HRD, so there is no comparison group of non-participants. The study covers one district, and the reported reliabilities come from a small pilot ($n = 20$) rather than the full sample. Finally, the composites are short five-item scales, and the interpretation of practice change rests on teachers' own judgements rather than observation or student outcomes.

Directions for Future Research

Future studies should combine teacher surveys with classroom observation and student outcome data, measure HRD dose and format directly, include non-participant comparison groups, use longitudinal or intervention designs, and extend the work to other districts and to qualitative inquiry into why technology integration lags.

Conclusion

Secondary school teachers in District Jhal Magsi view HRD practices positively and link them to better lesson planning, classroom management, and overall performance, with a weaker association for technology integration. These associations are descriptive rather than causal, but they point to practical priorities: sustained, practice-linked HRD with coaching and follow-up, technology training that combines technical and pedagogical support, and stronger administrative backing for participation.

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