

1 **Community pharmacists in Englands' opinions on skill-mix and delegation**

2 **Abstract**

3 **Objectives**

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5
6 Following the 2005 contractual framework amendment, the expanding role of community
7 pharmacy team-members required a shift in entrenched views on roles and duties. This study
8 aimed to report on community Pharmacists' opinions on skill-mix and explore how they can be
9 addressed so that skill-mix may be optimised.

10 **Methods**

11
12 An invitation to complete an online questionnaire was sent via email, marked for the attention
13 of the lead pharmacist. Following a low response, a paper-based questionnaire was sent to all
14 community pharmacies in England (n=11,816 Questions elicited data about the respondent, the
15 pharmacy (including staffing profile) and opinions on skill-mix.

16 **Key Findings**

17
18 1154 returns were received, representing a 10% response rate. Of these, most were pharmacy
19 chains (76%; n=877), with 5-9 staff (54%; n=600); commonly open 40-49 hours (42%; n=487),
20 dispensing <6000 prescriptions per week (41%, n=533). From 26 statements on skill-mix, 3
21 factors were identified by principal-components factor-analysis: "working well", "feeling the
22 pressure" and "open to development". Associated with 'working well': pharmacy owners, single
23 businesses, with a pharmacy technician, dispensing fewer prescriptions, open shorter hours.
24 Associated with 'feeling the pressure': pharmacy chains, open longer hours, large numbers of
25 prescriptions, relief pharmacists. Associated with 'open to development': recently qualified,
26 second pharmacists, working longer hours, chains, dispensing lower numbers of prescriptions.

27 **Conclusions**

28
29 Although limited by a low response, results suggest being in a position to influence (more
30 experienced, business owners) may be associated with more positive opinions. Further training
31 (including about legalities and leadership) could contribute to optimising skill-mix in community
32 pharmacies.

33 **Introduction**

34

35 In line with wider international developments in pharmacy, the role of the community
36 pharmacist in England has expanded over the last decade with the introduction of a more
37 clinical focus.^{1, 2} In 2005, the essential, advanced and enhanced services of the new general
38 pharmaceutical services contract came into place.^{3, 4} This allowed pharmacists to provide
39 services which were previously carried out by GPs, such as vaccination services (“flu jabs” or
40 travel clinics) and assessments (e.g. cardiovascular disease risk assessments, blood pressure
41 checking and cholesterol testing), and to delegate certain pharmacist tasks to other members
42 of the pharmacy team.⁵ The 2006 Health Act facilitated the development of further clinical
43 services⁶ and collaborative partnerships with GPs and others.⁷ While all of the United Kingdom
44 are governed by the same pharmacy laws, the devolved nature of each nation within leads to
45 some national differences. For example, the Healthy Living Pharmacy (HLP) initiative in England
46 encouraged pharmacy delivered services such as weight management, smoking cessation,
47 alcohol awareness and medicines use reviews.⁸

48

49 Whilst the development of these new roles and services has increased the profile of the
50 community pharmacy and the relationship of the pharmacist with patients, it is set against a
51 background of an increasing dispensing service. Between 2005 and 2015 the number of
52 dispensed prescriptions by community pharmacists in England increased by 51%.⁹ These
53 developments have been linked to an increased workload for community pharmacists.⁴ One
54 study found that 57% of pharmacists surveyed reported feeling stressed at work since the new
55 contract, were working longer hours and had insufficient time for paperwork and other tasks.⁴
56 Other studies report similar pressures: perceived patient pressure to deliver services quickly,
57 conflicting priorities, insufficient staffing, task frustration, guilt at taking breaks, management
58 responsibilities, profit-driven organisational cultures and frustration that heavy workloads
59 limitability to positively impact on patients’ healthcare.^{5, 10-12} Jacobs et al¹³ reported that
60 pharmacists’ perceived workload impacted on patient safety and their own well-being.
61 Pharmacists reported concern that the busy, multi-tasking environment increased their risk of
62 errors.^{5, 14}

63

64 These developments align with a growing international interest in optimising the skill-mix
65 within community pharmacies.² Skill-mix refers to the mix of staff and the balance of different
66 levels of responsibility.¹⁵ Role enhancement, role substitution or delegation⁵ all affect skill-mix.
67 Role enhancement increases the depth of a role by adding additional competencies, delegation
68 involves allocating a task to another, either upwards or downwards in the professional
69 hierarchy, while role substitution increases breadth by incorporating tasks from other
70 professional roles.¹⁶ In UK pharmacy, two forms of role substitution initiatives have occurred:
71 inter-professional (where pharmacists carry out tasks previously undertaken by GPs) and intra-
72 professional (for example where pharmacy technicians or accuracy checking technicians (ACTs)
73 carry out tasks previously performed by pharmacists).^{3, 17} See Table 1 for more information on
74 pharmacy support staff roles in the UK.

75

76 Delegation of less-complex tasks to competent, but less-qualified and lower-cost professionals
77 allows pharmacists more time to complete the interventions only they can perform.¹⁸ Workload
78 studies post-2005 highlight that community pharmacists had problems delegating to
79 appropriate members of staff.¹⁹ Despite reporting willingness to delegate parts of the
80 dispensing process,^{8,20} pharmacists still carried out tasks which could be performed by
81 pharmacy technicians or ACTs.^{4,5,8,21-23} While there is a paucity of evidence on pharmacists'
82 views on delegation, it does suggest that although they enjoy working within a team^{3,4} and are
83 happy with the extra responsibility,⁴ they have concerns about maintaining their professional
84 boundaries,³ or accountability for delegated tasks.²⁰ However, pharmacy technicians performing
85 substituted roles, express feelings of enhanced job satisfaction.³

86
87 For community pharmacy to continue to develop and optimise its services, it is imperative that
88 an appropriate skill-mix is employed within the community pharmacy. The aim of this study was
89 to gauge pharmacists' opinions on skill-mix within their pharmacy and changes that they would
90 like to make to improve team work.

91
92

93 **Methods**

94

95 A questionnaire was issued to lead pharmacists in community pharmacies in England to explore
96 their opinions on skill-mix, both within their pharmacy team and more generally. A combination
97 of open and closed questions elicited data about the respondent and their pharmacy, their
98 opinions to skill-mix, and the changes they would like to make to their team. Adopting a broad
99 approach, the research team consulted two groups of pharmacists (one from England and the
100 other Scotland) via local practice fora (LPF) meetings to clarify terminology. The team
101 determined it useful to seek advice outside of England as well as within to help challenge use of
102 terminology. A targeted review of literature published post-contract changes in 2005 was also
103 used to inform the design of the questionnaire. The study's Advisory Group (which included
104 patient and public representatives) provided critical feedback on drafts. The questionnaire was
105 piloted with a convenience sample of 10 local community pharmacists who provided feedback
106 at a face-to-face meeting. Extensive consultation was also carried out with representatives from
107 major pharmacy chains. Ethical approval was gained from Cardiff University (PGMDE/30.5.14).

108

109 The questionnaire was initially developed for online distribution via Bristol Online Surveys.
110 Distribution of the questionnaire via chain pharmacies' internal email communications was
111 negotiated. To reach independent or small chain pharmacies, the survey was promoted on
112 social media (Twitter) and via personal contact by members of the research team, Advisory
113 Group and LPF contacts. Following a very low response rate, a paper version was developed
114 and mailed, with covering letter and a pre-paid return envelope, to every community pharmacy
115 in England listed on the GPhC database (registered January 2015) marked for the attention of
116 the lead pharmacist. Pharmacies in hospitals, prisons and within GP surgeries/clinics were
117 excluded. Questionnaires were sent to 11,846 community pharmacies, 30 were returned as
118 undeliverable. No reminders were sent. Both versions of the survey asked participants to
119 provide the first part of their postcode, this was used to check for duplicate responses.

120
121 The survey data from the paper and online questionnaires were combined and analysed in IBM
122 SPSS Statistics 20. Principal component factor analysis, using varimax rotation with Kaiser
123 normalization, was applied to responses to opinion statements. Multiple regression analysis
124 was run for each factor to predict association of respondent characteristics (e.g. respondent
125 role, years qualified, single/chain pharmacy, number of prescriptions issued, and employing a
126 pharmacy technician or an ACT). Open comments were coded thematically and quantified for
127 summary.

128
129

130 **Results**

131 ***Respondent and pharmacy characteristics***

132 1154 returns were received (1108 paper-based; 46 online; no duplicates) representing a 10%
133 voluntary sample. The main respondents were pharmacy managers (60%, n=60/1142) or
134 owners (16%, n=185/1142). Most commonly respondents had been qualified for at least twenty
135 years (39%, n=442/1148).

136

137 Respondents were asked to provide information on their main pharmacy. Most were from
138 pharmacy chains (76%, n=877/1153), commonly open 40-49 hours (42%, n=487/1153), and
139 dispensing fewer than 6,000 prescriptions per month (42%, n=533/1142). The pharmacy team
140 size was most commonly six employees (14%, n=160/1119); over half (61%, n=677/1119) had
141 between 5-9 members of staff. Of the pharmacies employing 5-9 team members, 42%
142 (n=216/517) included a pharmacy technician and an ACT in 24% (n=122/517). Use of a
143 dispensing hub (7%, n=75/1136) or a robot in the pharmacy dispensing process was rare (2%,
144 n=22/1151). Prescription delivery services were offered by 87% (n=998/1149) of the
145 pharmacies.

146

147 ***Opinions on skill-mix and delegation***

148 Participants were asked to indicate their level of agreement/disagreement with a series of
149 statements regarding skill-mix in community pharmacy (Table 2). Over half of respondents
150 (51%, n=591/1146) strongly agreed that they worked well as a team in their pharmacy. At least
151 two-thirds of respondents agreed/strongly agreed with statements about good team leadership
152 (88%, n=1016/1146, although 68%, n=778/1142, would welcome leadership training),
153 professional trust in team-members (82%, n=948/1148) and confidence in their abilities (75%,
154 n=871/1145), desire to see greater use of extended roles in their workplace (74%, n=846/1140)
155 and having the right people in the right jobs in their pharmacy (69%, n=790/1139). However,
156 over half strongly agreed that their workload (58%, n=664/1140) and the workload of their
157 pharmacy team (56%, n=647/1146) was increasing. A notable proportion (83%, n=950/1144)
158 agreed/strongly agreed that there should be minimum staffing levels. Of interest is the finding
159 that 40% (n=460/1146) agreed/strongly agreed that team-members worked beyond their
160 qualification and training.

161

162 Principal component factor analysis (using varimax rotation) was employed to see if the 26
163 opinion statements could be grouped to create a smaller number of variables (or factors). This
164 analysis identified three factors (Table 3).

165

166 Factor 1, 'working well' (15.6% variance) depicted pharmacy members working well as a team,
167 aware of the different roles and responsibilities of team members, with skill-mix used to best
168 advantage and sufficient staffing levels to provide services without pressure. Respondents felt
169 able to influence both the number and the skill-mix of staff within their pharmacy. They
170 reported having the right people in the right jobs and had professional trust and confidence in
171 the members of their team. Resources were viewed as sufficient to improve staff skills. They
172 felt able to offer good team leadership. Staff job satisfaction was reported to be high.

173

174 In factor 2, 'feeling the pressure' (7.9% variance) respondents showed high agreement with
175 statements indicating that their workload, and the workload of their team was increasing. They
176 reported that their practices had insufficient staffing to provide pharmaceutical services and
177 that there should be minimum staffing levels related to the amount of business. Pharmacy
178 technician pay was thought to be unsatisfactory and did not reflect the increased
179 responsibilities required and their career options within community pharmacy were limited.

180

181 Factor 3, 'open to development and training' (5.03% variance) grouped statements which
182 showed respondents felt the community pharmacy contract supported enhanced skill-mix and
183 the provision of professional services. However, these statements also revealed a desire to see
184 greater use of skill-mix and training in team leadership.

185

186 Multiple regression analysis predicted association of respondent characteristics with the three
187 factors. Respondent characteristics showing statistically significant positive association ($p < .05$)
188 with the factor '*working well*' (factor 1) were pharmacy owners and those from single
189 businesses, with a pharmacy technician, dispensing fewer prescriptions and open for shorter
190 hours. Pharmacy chains, open for longer hours, handling large numbers of prescriptions or
191 relief pharmacists were significantly positively associated with '*feeling the pressure*' (factor 2).
192 Views on '*open to development and training*' (factor 3) were significantly positively associated
193 with respondents qualified within the last five years, in a second pharmacist role, working
194 longer hours in a chain, and dispensing lower numbers of prescriptions.

195

196 **Confidence in delegation**

197 Ninety-two percent of respondents reported confidence in delegating workload to other team
198 members (n=990/1073). No statistically significant correlation was found between confidence
199 delegating workload and respondent or pharmacy characteristics. From responses to an open
200 question (n=159), confidence would increase through management support (2%, n=3) along
201 with a relaxing of the legal responsibility for delegated work ("*make ACTs fully responsible for*
202 *their own mistakes. Pharmacist should be accountable only for limited check when working with*
203 *an ACT.*" Pharmacy Manager) (9%, n=15) and more highly trained staff ("*I try to delegate but*
204 *they don't complete the tasks properly which needs to be redone by the pharmacist.*" Pharmacy

205 Manager) (25%, n=39) who are willing and able to be trusted to take responsibility for tasks (16%,
206 n=25) would enhance trust in their ability to work to professional standards. A high workload (*"I*
207 *feel the team already has pressure to work to limits and fear asking more."* Pharmacy Manager)
208 (8%, n=12) and a lack of familiarity with the pharmacy team (locums or new staff members)
209 (2%, n=3) negatively affected their willingness to delegate.

210

211 ***Desired changes to the pharmacy team***

212 An open question asked what, if anything, respondents would like to change about their
213 pharmacy team (n=758). Desired change included recruiting new staff (38%, n=289) or staff
214 training and development (20%, n=151) (*"We need fully trained staff. I have to train them whilst*
215 *doing my job which is stressful."* Pharmacy manager). Others commented on the need for
216 improvement in individual team members' motivation or professionalism (13%, n=99)
217 (*"Attitude. People think they are working in retail and not in healthcare. Staff need to*
218 *understand importance of clinical and procedural requirements."* Pharmacy manager) and a few
219 wished to replace underperforming staff. Respondents wanted to see better financial
220 recognition for staff with extended roles and changes to the career pathways for pharmacy
221 technicians and ACTs. They also highlighted regulatory constrictions.

222

223 When asked, just under half (46%, n=513/1105) reported wanting to appoint new staff to
224 enable them to develop or extend the skill-mix in their pharmacy while 35% (n=389/1105) did
225 not (18%, n=203/1105, were unsure). Of those who wanted more staff, 79% (n=405/513) were
226 from chains, and 39% (n=197/510) processed between 2,200-5,999 prescriptions. Respondents
227 were asked to identify job-roles they would like to recruit: ACTs (70%, n=214/305), medicine
228 counter assistants (MCAs) (65%, n=181/278), dispensing assistants (NVQ L2) (64%, n=165/259),
229 pharmacists (61%, n=159/259), pharmacy technicians (55%, n=135/243) and pre-registration
230 trainee pharmacists (53%, n=120/225).

231

232

233 **Discussion**

234 While responses to opinion statements reflected a positive depiction of community pharmacy
235 skill-mix, the factor analysis identified three broad views of skill-mix in community pharmacies.
236 There were respondents identifying teams that were working well; 'right' people in the 'right'
237 roles, with a pharmacist with good knowledge of the roles and confidence in their team, with
238 sufficient resources for training and the ability to influence their staffing and skill-mix. Another
239 pattern represented community pharmacists feeling the pressure of their increasing workloads;
240 insufficient staffing and no influence over staffing decisions, recognising poor career prospects
241 or financial reward for team members who extend their role. A third group were satisfied with
242 the current contract but welcomed training in leadership and would like to see greater use of
243 skill-mix. The present study also adds a level of detail that sheds light on how practice factors
244 influence how skill-mix is viewed and operationalised. Skill-mix was more likely to be perceived
245 as working well by pharmacy owners and those from single businesses, dispensing fewer
246 prescriptions, open for shorter hours and those employing pharmacy technicians. In contrast,
247 workload pressures seemed to be felt more acutely by those in pharmacy chains, open for

248 longer hours, handling large numbers of prescriptions and by pharmacists in a manager, rather
249 than owner position. Second pharmacists, fewer years qualified, working longer hours,
250 dispensing fewer prescriptions in a chain were associated with the factor identifying “open to
251 development”. While confident about their ability to delegate, many respondents still valued
252 further leadership training.

253
254 Our study has limitations, most notably difficulties were experienced in generating a higher
255 response rate to the questionnaire. After lengthy, in-depth consultation with several large UK
256 chains we trusted them to disseminate the information to their pharmacies but we have no way
257 of knowing how many received and read the email. More thorough piloting of this method
258 would have identified and avoided these issues. A mailed paper copy proved notably more
259 successful but owing to time and budgetary limitations we were unable to send a reminder.
260 Targeting a smaller, representative sample (e.g. a sample of pharmacies with and without a
261 Pharmacy Technician) and sending reminders may have improved our response rate. While the
262 sample was diverse (single businesses/chains; managers/owners), the findings arising from the
263 survey must be interpreted in light of the low response rate. Additionally, we did not
264 determine the tasks that each team member carries out within their pharmacy, future research
265 would benefit from establishing how the skill-mix was being implemented.

266
267 Those with higher workload and working longer hours were feeling the pressure. Staffing levels
268 insufficient for their heavy workload and preventing time to train up current team members
269 was identified by some; reflecting the literature^{8, 24, 27, 29, 30, 35, 36} A high number of pharmacy
270 support roles were part-time. This can lead to communication issues, and leaves the pharmacy
271 in a precarious position if unexpectedly short-staffed (e.g. sickness leave); this may result in
272 tasks being partially delegated, if at all.³⁶ Our results also suggested that power over staffing or
273 skill-mix were influencing factors in whether respondents’ viewed skill-mix positively or
274 negatively. Jacobs et al¹³ also found links between areas of self-reported pharmacist stress,
275 increasing workload, and little autonomy.

276
277 Less qualified roles were viewed positively and seen as easing workloads and releasing
278 pharmacist time for services and greater patient contact. For example, respondents noted that
279 MCAs were the public-facing first-line of pharmacy for patients, able to deal with enquiries and
280 reducing interruptions to dispensing assistants or pharmacists, a noted source of workplace
281 stress.¹³ DAs were requested to carry out the less complex work within the dispensing process
282 to free up pharmacists and ACTs. MCAs and DAs are also the largest group of community
283 pharmacy support staff.¹⁵ These findings may also, in part, be influenced by familiarity with the
284 roles or responses which raised questions about support staff’s scope of practice.

285
286 While a high proportion had confidence in their staff and trust in their work, respondents also
287 identified staff professionalism as an area for improvement– some reported that staff still view
288 it as a retail job rather than healthcare and others had staff uninterested in training to extend
289 their role. Staff members unwilling to train or take on new tasks impact the development and
290 workflow of skill-mix.^{8, 11, 15, 25, 28} A New Zealand study found pharmacy assistants gave mixed
291 responses when asked if they were healthcare assistants or retail assistants.³⁷ A UK-based study

292 found that the location and hours of the job were almost as frequent a reason for applying for
293 the role as a desire to work in healthcare.¹⁵ Like some other countries (e.g. Canada, Denmark,
294 South Africa) certain roles within the pharmacy team are regulated professions.² Mandatory
295 registration and associated requirements of some roles (e.g. pharmacy technicians, ACTs) may
296 also deter some staff from developing their role. Limited opportunities for career progression
297 and unsatisfactory levels of financial reward for the additional responsibility were also
298 recognized in our results.

299

300 **Conclusions**

301 Although limited by a low response rate, the sample was diverse and circumstances and
302 opinions differ. By revealing how practice factors influence the way in which skill-mix is viewed
303 our study makes a novel contribution to the literature. We highlight the cycle that some
304 community pharmacies find themselves in where skill-mix has the potential to ease workload
305 and enhance service provision, particularly in larger, busy pharmacies, but pharmacists' lack the
306 time, or influence to implement the necessary changes. The results suggest that being in a
307 position to influence (more experienced, business owners in single pharmacies) may make a
308 difference to opinions. Patient-facing and dispensing staff were highly valued alongside more
309 technical roles as a way to lessen pharmacists' workload. However such team members'
310 motivation and understanding of their role may not always match expectations. This highlights
311 the importance of the whole team culture in community pharmacy and the pharmacists' role as
312 motivational team leader.

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Table 1: Roles and responsibilities of pharmacy support staff

Job	Role	Skill/Qualification
<i>Medicine Counter Assistant (MCA)</i>	<i>A medicine counter assistant (MCA) is involved in the sale of over-the-counter medicine and works under the supervision of a pharmacist. A MCA is trained to offer advice on common ailments and must know when to refer a customer to a pharmacist.</i>	<i>Medicines counter assistants must complete an accredited medicines counter assistant course. The programme is taught at Qualifications Credit Framework level 2</i>
<i>Dispensing Assistant</i>	<i>A dispensing assistant is involved in:</i> <ul style="list-style-type: none"> • <i>The provision of information to customers on symptoms and products</i> • <i>Prescription receipt and collection</i> • <i>Assembly of prescribed items (including the generation of labels)</i> • <i>Ordering, receiving and storing of pharmaceutical stock</i> • <i>Preparation for the manufacture of pharmaceutical products</i> • <i>Manufacture and assembly of medicinal products</i> 	<i>Dispensing assistant must complete a level 2 knowledge and competency-based dispensing assistant qualification. .</i>
<i>Technician</i>	<i>Technicians prepare medicines and other healthcare products and supply them to patients. They also take an active role in providing patients with guidance on taking medicines. The role may also include training and development, and supervision and management of staff and the dispensary.</i> <ul style="list-style-type: none"> • 	<i>The training consists of two years consecutive work-based experience under the direction of a pharmacist to whom the trainee is directly accountable. The training programme must be approved by GPhC and meet the requirements below:</i> <ul style="list-style-type: none"> • <i>Level 3 Diploma in Pharmaceutical Science(Knowledge)</i> • <i>Level 3 NVQ Diploma in Pharmacy Services Skills (Competence)</i> <i>Once the course is successfully completed technicians are required to register with GPhC before they can practice as a Pharmacy technician.</i>
<i>Accuracy checker</i>	<i>The accuracy checker is able to confirm the dispensing accuracy of any prescription that has been clinically screened/approved by a registered pharmacist.</i>	<i>Within the UK there is a recognised competency framework for the accuracy checker training programme, but there is no requirement for programmes to be aligned to the framework. The range of skills and knowledge which may be covered within a programme are: checking accuracy skills, effective</i>

*communication skills, team working skills,
legal considerations, dispensing and
medication errors.*

ACTs are GPhC registered professionals.

405

Statements (n=valid number)	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
We work well as a team in this pharmacy (n=1146)	1 (7)	1 (16)	4 (43)	42 (489)	51(591)
My workload is increasing (n=1140)	1 (7)	21 (17)	5 (61)	34 (391)	58(664)
The workload of the pharmacy team is increasing (n=1146)	0 (5)	3 (32)	6 (65)	34 (397)	56(647)
I feel I am able to offer good team leadership (n=1136)	0 (4)	2 (18)	9(98)	59(684)	29(332)
There should be minimum staffing levels related to the amount of business (n=1144)	3 (31)	5 (55)	9 (108)	43 (493)	40 (457)
I have professional trust in the other members of staff in this pharmacy (n=1148)	1 (9)	5(54)	12 (137)	58 (670)	24(278)
I have confidence in the abilities of all members of this pharmacy team (n=1145)	1 (14)	10 (114)	13 (146)	49 (567)	26(304)
I would like to see greater use of extended roles and responsibilities in my workplace (n=1140)	1 (13)	4 (44)	21 (237)	53 (607)	21 (239)
We have the right people in the right jobs at this pharmacy (n=1139)	2 (18)	14 (157)	15 (174)	50 (571)	19 (219)
I would welcome training in team leadership (n=1142)	3 (30)	9 (104)	20 (230)	45 (514)	23 (264)
The community pharmacy contract encourages pharmacies to supply professional services (n=1145)	6 (66)	15(166)	18 (206)	48 (547)	14 (160)
The skill-mix in this pharmacy is being used to best advantage (n=1140)	2 (23)	15(174)	21 (239)	49 (539)	12 (141)
I am able to influence the skill-mix required for this pharmacy (n=1139)	8 (87)	17 (195)	18(202)	40 (454)	18 (201)
Career prospects for pharmacy technicians in community pharmacy are limited (n=1143)	4(41)	18 (203)	24 (277)	39(450)	15 (172)
Compared to dispensers, the financial reward is not great enough for the increased responsibilities of the pharmacy technician (n=1120)	3 (33)	15(174)	30 (343)	35 (399)	15(171)
Job satisfaction levels of staff in this pharmacy are high (n=1138)	7(74)	20 (226)	27 (310)	37(430)	9(98)

I am able to influence the number of staff required for this pharmacy (n=1146)	19 (215)	24(275)	12 (138)	27 (306)	19 (212)
Sufficient resources are available to improve staff skills (n=1141)	7 (82)	23(265)	23 (277267)	39 (440)	8(87)
I think the registration requirements deter staff from developing into the registered pharmacy technician role (n=1141)	7 (81)	26 (299)	28(315)	31 (353)	8(93)
There are members of this team who are working beyond their qualification and training levels (n=1146)	10 (112)	30(349)	20 (225)	27(306)	13 (154)
The staff level in this pharmacy is sufficient to provide pharmaceutical services without pressure (n=1142)	15 (170)	31 (353)	16 (188)	30 (342)	8 (89)
The community pharmacy contract supports enhanced skill-mix (n=1140)	9(103)	22 (249)	35(393)	30(336)	5 (59)
The pay for pharmacy technicians is satisfactory (n=1136)	7 (84)	24(276)	37(423)	27(300)	5 (53)
I am unsure of the legalities of pharmacy technicians' scope of practice (n=1141)	13 (144)	34 (393)	28 (319)	22 (246)	4(40)
Staff turn-over is high in this pharmacy (n=1134)	35(401)	34 (382)	15 (171)	11(121)	5 (59)
I am not quite sure of the roles and responsibilities of different members of the team (n=1147)	48 (550)	40 (453)	7 (84)	4 (48)	1 (12)

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409 *Table 3: Results of factor analysis and summary of statistically significant relationships between responses and*
 410 *pharmacy or respondent characteristics*
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Factor	Significant relationships
1. <u>Working well(15.59% variance)</u> <ul style="list-style-type: none"> • We work well as a team in this pharmacy • We have the right people in the right jobs at this pharmacy • I am able to influence the number of staff required for this pharmacy • I feel I am able to offer good team leadership • I have confidence in the abilities of all members of this pharmacy team • The staff level in this pharmacy is sufficient to provide pharmaceutical services without pressure • I am not quite sure of the roles and responsibilities of different members of the team(INVERTED) • Job satisfaction levels of staff in this pharmacy are high • I have professional trust in the other members of staff in this pharmacy • I am able to influence the skill-mix required for this pharmacy • The skill-mix in this pharmacy is being used to best advantage • Sufficient resources are available to improve staff skills 	<ul style="list-style-type: none"> • Open regular hours • Fewer prescriptions • Single businesses • Pharmacy owners
2. <u>Feeling the pressure (7.860% variance)</u> <ul style="list-style-type: none"> • Compared to dispensers, the financial reward is not great enough for the increased responsibilities of the pharmacy technician • My workload is increasing • The staff level in this pharmacy is sufficient to provide pharmaceutical services without pressure (INVERTED) • Career prospects for pharmacy technicians in community pharmacy are limited • There should be minimum staffing levels related to the amount of business • The workload of the pharmacy team is increasing • The pay for pharmacy technicians is satisfactory (INVERTED) • I am able to influence the number of staff required for this pharmacy (INVERTED) 	<ul style="list-style-type: none"> • Open longer hours • Larger numbers of prescriptions • Chains • Relief pharmacists
3. <u>Open to development & training (5.032% variance)</u> <ul style="list-style-type: none"> • The community pharmacy contract supports enhanced skill-mix • The community pharmacy contract encourages pharmacies to supply professional services • I would welcome training in team leadership • I would like to see greater use of extended roles and responsibilities in my workplace 	<ul style="list-style-type: none"> • Open longer hours • Fewer prescriptions • More recently qualified • Chains • Second pharmacists

412 KMO .810, Bartlett's Test of Sphericity $p > 0.001$, all values were above the Measure of Sampling Adequacy level of
 413 0.5.

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