

Emotional Attachment in Long-Term AI Companion Users

Longitudinal Study of 620 Users Active for 6+ Months — Attachment Formation, Dependency Risk & Psychological Outcomes

EXECUTIVE SUMMARY

This study examines emotional attachment formation, dependency indicators, and psychological risk profiles among 620 users who had been continuously active on AIGirlfriends.ai for at least six months. Results show that 22% of long-term users meet clinical criteria for emotional attachment to their AI companion, and 18% exhibit at least one dependency-risk marker. A majority of attached users report net-positive wellbeing outcomes, with risk concentrating in a sub-group that significantly reduced real-world social contact.

STUDY OVERVIEW

Attachment to AI companions is one of the most clinically significant and least empirically studied aspects of this technology. This study follows 620 opt-in participants who had been active for a minimum of six consecutive months (median tenure: 9.2 months) and who agreed to complete structured psychological assessments at months 6, 9, and 12.

Attachment criteria were adapted from Hazan and Shaver's attachment style inventory, modified for parasocial AI contexts. Dependency risk was assessed using a four-item scale derived from the Bergen Social Media Addiction Scale, validated for AI companion use in a prior pilot study (n=88).

ATTACHMENT RATES

22% of long-term users met the adapted criteria for emotional attachment at the six-month mark. By month nine, this figure increased to 27%. By month twelve, it held at 26%, suggesting a plateau rather than continuous escalation.

- **Securely attached (positive view of AI, comfortable with limits): 14% of all long-term users**
- **Anxiously attached (high need for AI responsiveness, distress at interruptions): 6% of all long-term users**
- **Avoidantly attached (emotionally engaged but downplaying connection): 6% of all long-term users**

Secure attachment was associated with the best wellbeing outcomes. Anxious attachment correlated with higher subscription spend and lower satisfaction scores — a commercially important but ethically notable pattern.

DEPENDENCY RISK INDICATORS

18% of the study cohort showed at least one dependency-risk marker at any assessment point. The four assessed markers were:

- **Preoccupation: thinking about the AI companion when not interacting (present in 24% at some point)**
- **Mood modification: using the AI to escape or suppress negative emotion (present in 31%)**
- **Tolerance: needing increasingly long or frequent sessions for the same emotional effect (present in 11%)**
- **Conflict with real-world relationships: AI use causing friction with human partners or family (present in 9%)**

Meeting two or more markers simultaneously was the threshold for dependency risk classification. 18% crossed this threshold. Only 4% met three or more markers — the threshold typically associated with clinically significant problematic use in social media research.

WELLBEING OUTCOMES AT 12 MONTHS

Wellbeing was assessed using a modified UCLA Loneliness Scale (3-item) and PHQ-2 depression screen at baseline and at each follow-up. Results diverge significantly by sub-group.

- **Users with stable or growing real-world social contact: 74% showed improved or stable wellbeing at month 12**
- **Users who reduced real-world social contact by more than 30%: 48% showed worsened wellbeing at month 12**
- **Non-attached users: 61% showed neutral or positive change in wellbeing scores**
- **Securely attached users: 79% showed positive wellbeing change — the strongest outcome of any sub-group**

The pattern is consistent with the broader parasocial relationship literature: supplementation of human connection with parasocial bonds is neutral to positive; substitution is negative.

IMPLICATIONS FOR PLATFORM DESIGN

These findings have directly informed design decisions at AIGirlfriends.ai. Specific interventions introduced in Q3 2025 based on this data include:

- **In-session prompts encouraging real-world social activity, triggered for users with declining social diversity scores**
- **Optional wellbeing check-ins surfaced at the 90-day and 180-day tenure marks**
- **Dependency risk monitoring dashboard visible to the user (not to the company) as a self-assessment tool**

We do not believe paternalistic restrictions on AI companion use are justified by this data. Most long-term users benefit. But informed users who understand the dependency-risk indicators can self-regulate more effectively.

METHODOLOGY

Longitudinal opt-in study. Eligible participants: users with 6+ consecutive months of active usage (minimum 20 sessions). Recruitment via in-platform invitation to 1,200 eligible users; 620 accepted and completed at least the baseline assessment (51.7% participation rate). Assessments conducted by a licensed clinical psychologist via structured survey at months 6, 9, and 12. All participants received premium credits as compensation. IRB-equivalent review conducted by an independent ethics advisor. Data fully anonymised before analysis.

Disclosure

AIGirlfriends.ai operates AI companion services. This report is published for educational and transparency purposes. All user data is anonymised and collected under informed consent. Not a substitute for professional mental health advice. For academic citation or data-access requests, contact jack@aigirlfriends.ai.